

American Artisan and Hardware Record

Sheet Metal—Roofing—Warm Air—Furnaces—Stoves

Vol. 91, No. 5

CHICAGO, JANUARY 30, 1926.

\$2.00 Per Year

NOTICE the heavy reinforced type of construction—the clean cut castings, large double doors and upright shaking lever.



PENINSULAR profits are attractive because they are adequate, permanent and safe. The Peninsular Agency is a money maker.

PENINSULAR FURNACE

THE Series 10-20D furnace is the kind of furnace that you recommend for the very highest class of warm air heating.

It has dozens of features, dozens of selling points that make it stand out prominently from the ordinary field. Our catalog is a highly interesting thing for you to read—it points out and describes these features in detail which of course can't be done here.

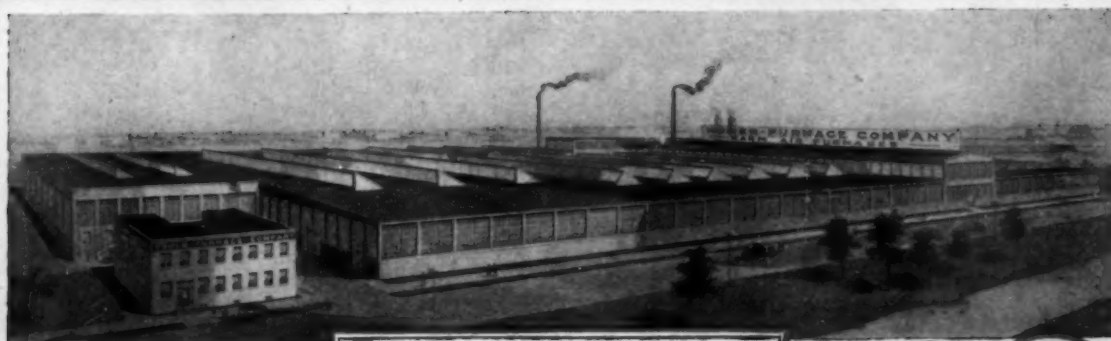
Send for a copy of our catalog and examine Peninsular 10-20D construction.


THE PENINSULAR STOVE CO.

DETROIT


CHICAGO







Ros Strong



Samuel D. Strong

*There's Harmony
in
Homer Heated
Homes*

McDonald Paint & Specialty Company
PAINTS, OILS AND CONTRACTORS
SPECIALTIES
100 SOUTH W. 10TH STREET
RALEIGH, N. C.

Oct. 15th, 1925.
Mr. C. B. Strong, Vice President,
Homer Furnace Company,
Coldwater, Mich.

Dear Sir:


We want to congratulate you on the entire Homer Furnace line also on the new Beach line.

Since establishing our Furnace department several years ago we have enjoyed our business relations with the Homer Furnace Co. and wish to say that with the splendid help of your sales department, its co-operation and the fine advertising help we have found Homer selling and easy and profitable department in our business and with the newly designed and improved Homer line we expect to further increase our sales.


We commend the Homer Furnace Co. and its products to all prospective dealers and trust that the New Year will bring you the continued success that you deserve.

Cordially yours,
McDonald Paint & Specialty Co.
John D. McDonald
President

McD.-H.



Bruce Strong



Ralph Strong

*Capacity 30,000
Furnaces
Annually*

The SUCCESS of HOMER UNITY

The recognition which the Homer Furnace Company enjoys as leaders among furnace manufacturers is due to unity in ideals and high quality workmanship coupled with a product which meets the needs of thousands of home owners. The fact that Homer Furnace Company is a family unit trained to service for the furnace buying public is truly an asset to your organization.

Dealers everywhere are reporting increased sales because the heat distribution qualities found in Homer Furnaces are so designed as to permit the greatest saving in fuel consumption.

Write today and ask that our dealer's sales plan be explained to you in full detail. This means greater success upon your endeavors to make your business a credit to both yourself and us. The increasing demand for Homer Heated Homes will be met by someone in your community.

HOMER FURNACE CO., Coldwater, Mich., U. S. A.

THE CINCINNATI SHEET METAL & ROOFING CO., Southern Distributors, CINCINNATI, OHIO
JANEY, SEMPLE, HILL & CO., MINNEAPOLIS, MINN., Northwestern Distributors
M. A. CARP & SON, 183—6th Ave., NEW YORK, N. Y., Eastern Distributors

You Can Increase! Your 1926 Business!

The **SUPER-SMOKELESS** Furnace is the only really smokeless furnace on the market. It brings satisfied customers and earns big profits for Dealers.



Cutaway View of
SUPER-SMOKELESS FURNACE

YOU can increase your 1926 Business by taking on the Utica line of furnaces. The Utica **SUPER-SMOKELESS** Furnace has definitely superior features found in no other furnace. It offers outstanding advantages to the Home Owner, and places the dealer above ordinary competition. You can get a real price for your work and reap larger profits with this remarkable furnace.

The new Utica Merchandising Plan will also bring more customers—sell more furnaces—and increase your profits. It has been thoroughly tested and is a *proved success*. Under this plan our representatives co-operate closely with our dealers and help them sell the furnaces they buy. It enables them to secure the largest possible amount of business and to secure satisfied customers who build future business.

It will mean Increased Business and Larger Profits to take on the Utica line of furnaces. Let us send, without obligation to you, full particulars about our **SUPER-SMOKELESS** Furnaces and Utica Merchandising Plan.

UTICA HEATER COMPANY

UTICA, N. Y.

Manufacturers of the

CHICAGO, ILL.

CELEBRATED LINE OF WARM AIR FURNACES FOR EVERY HEATING NEED



UTICA HEATER COMPANY, Utica, N. Y.

Gentlemen:

Please send, without obligation to me, complete information about your **SUPER-SMOKELESS** Furnace and the new **UTICA MERCHANDISING PLAN**.

Name.....

Address.....

F2-104



20 years of Success and Service behind every Wise Furnace

THE dealer doing business with Wise furnaces and the Wise agency sells furnaces that have proven successful and unusually satisfactory for over twenty years.

He offers to his public furnaces that are noted for their great durability and numerous heating and convenience features.

The dealer who secures the Wise agency for his territory aligns himself with a company that believes and lives up to its policy of real Service in deliveries and all other transactions.

The Wise guarantee is this:

Highest Quality, Best Workmanship, and Absolute Satisfaction to the dealers.

Wise furnaces represent high grade warm air heating service at an economical cost.

*Write for interesting catalog and
agency details **NOW***

The WISE FURNACE CO.
AKRON, OHIO



When Money Doesn't Talk

THE ordinary furnace man with the ordinary furnace feels he has to bid low to get the job.

The dealer with the Moncrief Furnace doesn't have to work on the low-bid basis.

He can deliver so much more for a more reasonable figure that he talks—and delivers—on a comfort-satisfaction basis.

There is more satisfaction for you—and for your customer—in the Moncrief Furnace Line.

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The
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*Manufacturers of single and double wall pipe
and fittings, galvanized pipe and fittings, etc.*

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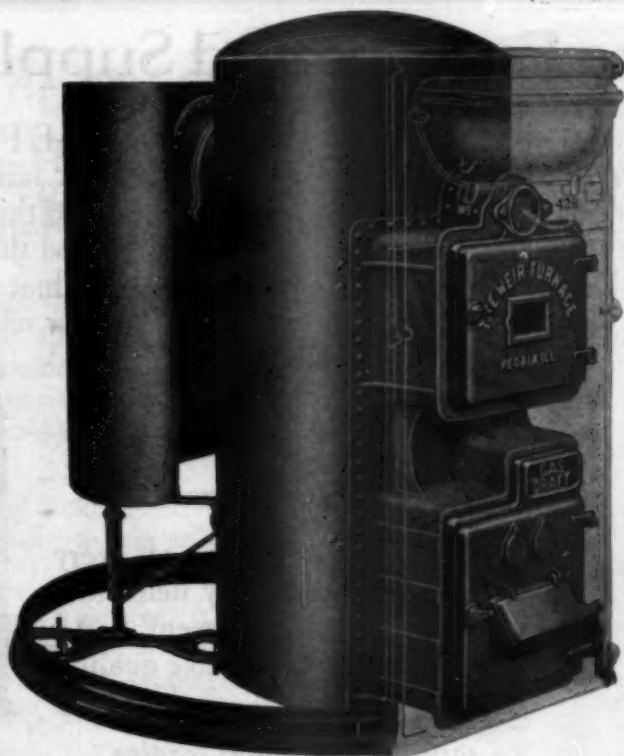
Western and Southern Distributors:

JOHNSON FURNACE CO. Kansas City, Missouri	MONCRIEF FURNACE CO. Atlanta, Ga.
MONCRIEF FURNACE & MFG. CO. Dallas, Texas	

MONCRIEF FURNACES

Weir Improved Construction

BOTH pouches and doors are surface ground-absolutely perfect fitting. Notice lever handle — adjustable hinges. Always a perfect-fitting door with this new feature.



A big new Weir feature

THE pouches or feed and ash throats extend thru the front. There are no door frames and no joints inside the casing. Doors are fitted direct to pouches.

Again—it is easier to sell the Weir

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He will easily realize that a man interested in having his home heated will be more easily convinced and sold if presented with indisputable high quality and efficiency *backed up with a real guarantee.*

The Weir furnace has always had real heating features to talk about and its quality has always been top-notch.

Now it possesses more real sales clinching features than any other furnace made.

Weir scientific construction is backed up by The Meyer Furnace Company with a brass plate permanently attached to the furnace guaranteeing its operation, and certifying its heating capacity.

On top of this each Weir is guaranteed for FIVE YEARS direct to the user. **THIS IS A REAL GUARANTEE—A BROAD GUARANTEE COVERING THE ENTIRE FURNACE—**with no strings attached.

And—these are just a few of the reasons why the Weir is easier to sell.

Write today for detailed information concerning Weir construction and the Weir guarantee.

The MEYER FURNACE Co

Peoria, Illinois

Weir *the* **Certified** **Steel** **Furnace**

When writing mention AMERICAN ARTISAN—Thank you!

A complete Furnace and Supply Service!

THE furnaces shown here, the Nesbit, the Weir and the Stanco, fit your every requirement for quality warm air heating and at the right price.



Nesbit All-Cast Furnace

LET us send you full details and catalogs covering this line. Let us show you the completeness of our furnace line and demonstrate our reliable service.



Weir All-Steel Furnace

WE carry large stocks of every needed furnace supply item from Registers to Furnace Cement. All leading makes and dependable quality.

*Let us fill your next order—
we will give you real service.*



Stanco Steel Furnace

STANDARD FURNACE & SUPPLY COMPANY
Omaha, Nebr. Western Service for Western Dealers Sioux City, Iowa

FLORAL CITY FURNACES



Are made in several
styles and many sizes

Write for catalogue and
agency proposition

Sold to the Trade Only

40 YEARS' EXPERIENCE

FLORAL CITY HEATING CO.

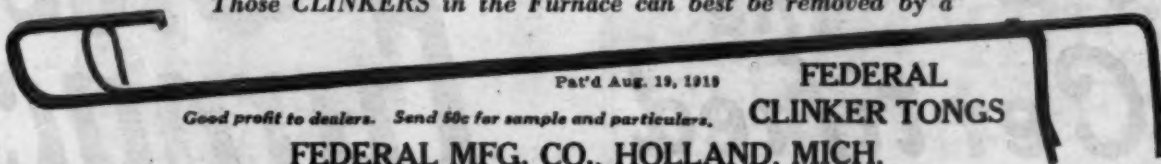
Chicago Office
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MONROE, MICH.

Detroit Office
413 West Fort Street



Those CLINKERS in the Furnace can best be removed by a



Pat'd Aug. 19, 1919

Good profit to dealers. Send 50c for sample and particulars.

**FEDERAL
CLINKER TONGS**

FEDERAL MFG. CO., HOLLAND, MICH.

Say you saw it in AMERICAN ARTISAN—Thank you!

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THE Wiechert fire pot is cast in two heavy sections and the middle joint designed to allow expansion and contraction. Both sections are strengthened by outside ribs, which increase the heating surface.

All joints are double locked, and are gas-proof and dust-proof—a big selling point for you.

Are you selling Wiechert Furnaces? You should—you will if you'll just show them and talk them. Get in on this profitable line. Write today for special dealer-proposition.

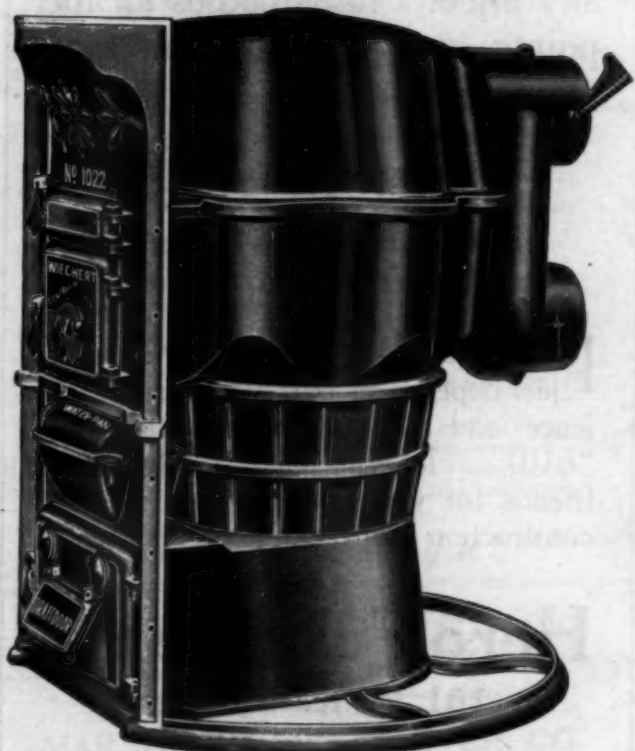
St. Clair Foundry Corporation
Centralia, Ill. Belleville, Ill.

WIECHERT

CENTRALIA

ILLINOIS

Advt. No. 2
of a series



No. 1000 SERIES PIPE FURNACES



Sell warm air heating on its merits—on its superiority over steam and hot water heating by selling a furnace that truly proves your arguments.

Most arguments in favor of warm air heating usually appeal to prospective buyers of heating systems.

The cost of the warm air heating system is much less—upkeep less and operation easier and when you are able to prove *absolute cleanliness and efficient as well as sufficient humidification* you should better any and all arguments advanced by your competitor the hot water and steam heating contractor.

The WESTERN BOILER PLATE FURNACE

is air-tight—clean heat is assured—the provision for properly humidifying the air is guaranteed by reason of its extra large water pan and its location on the furnace.

There are numerous other reasons why the Western is securing sales that would ordinarily fall to the competing field. We want to tell you all of these reasons—just tell us to tell you.

REMEMBER THE WESTERN IS BACKED BY
AN IRON-CLAD GUARANTEE

Write today

Complete Stocks carried by these distributors

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American Foundry and Furnace Co., Bloomington, Ill.

KANSAS AND MISSOURI

Kansas City Furnace Co., Kansas City, Mo.

THE WESTERN STEEL PRODUCTS CO.
DULUTH, MINN. MINNEAPOLIS, MINN.



HERE IS QUALITY



EXCELSIOR
SELF-LOCK-
ING DOUBLE
WALL STACK
leads the field for
the following rea-
sons:

Has one tongue only
and is made from
full weight stock.

Separator and plas-
ter clinch part of
stack proper.

Stud hanger set in
recess, ready to be
pulled over and
nailed.

The first NON-
VENTED STACK
placed on the mar-
ket.

**QUALITY
GOODS
COUNT**

**THE
EXCELSIOR STEEL
FURNACE CO.**

118 So. Clinton St.

Chicago, Ill.

HERO "600"



The 1926 Leader

HERO "600" is the best
furnace you can install at
any price. It embodies all the
points you have wanted in
a quality line.

*Wonderful heater—
Economical on fuel—
Dust—dirt—gas tight—
Long life of hard service.*

IF you want a real furnace for a leader
just depend on our 30 years' expe-
rience and tie up with the HERO
"600." It will make business and
friends for you. Write for details of
construction that make it superior.

Hero Furnace Co.

101 De Kalb Street
Sycamore, Ill.

New name, new features, old time high quality, improved construction, a new size and also a new furnace—

AFCO

New Copyrighted Name of American Furnaces

BOILER PLATE FURNACES

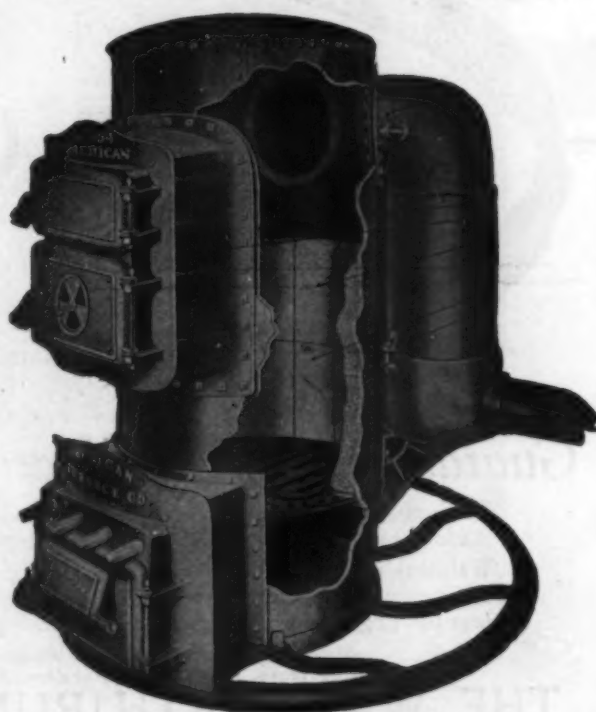
THE American Agency for 1926 means more than ever before with these new and better business getting assets.

We have increased our production facilities also by installing \$50,000 worth of new machinery.

We want to tell you in detail all about the improvements on AFCO BOILER PLATE FURNACES and the new size and also our NEW CRESCENT TYPE RADIATOR STEEL FURNACE.

Write today for complete details and the American Agency offer.

AMERICAN FURNACE CO.
2719 to 2731 Morgan Street St. Louis, Mo.



"AFCO" BOILER PLATE FURNACE
(Formerly Known as the AMERICAN)

The MARSHALLTOWN Idea

has been accepted by thousands of home owners and hundreds of live dealers.

THE Marshalltown Idea of a superior steel furnace had immediate success and now its popularity is growing by leaps and bounds.

What is this Marshalltown Superior Construction?

NOT hard to find really—this illustration tells a good part of the story.

Massive, durable steel construction—air and gas tight—three flue crescent radiator—immense direct radiation—pouches on which doors hang extending clear through front—positive action gravity direct draft damper, and dozens of other easily recognized features of superiority.

What about selling it?

The sales agency is something you've often wished for—a real, clean cut money-making proposition.

We cooperate on sales and engineering—we want you if you are a live dealer.

This furnace will be displayed at the following conventions: Grand Rapids, Mich., Feb. 9-12; Saint Paul, Minn., Feb. 16-19; and Philadelphia, Pa., Feb. 16-19.

Write today and we'll send complete dealer information and illustrated catalog.

MARSHALLTOWN HEATER CO.
MARSHALLTOWN, IOWA





WALWORTH CASING RINGS

Made of Steel

Guaranteed Exact Measurements and True Circles

Our long years of experience and modern equipment enable us to make these casing rings high grade in every respect and fully guarantee them.

Walworth Casing Rings are made to individual requirements and measurements, full circles for ordinary use and partial circles for full cast fronts. With lugs for Double Casing and without lugs for Single Casing. Write today for descriptive circular and prices.

Made by the makers of Walworth Double Gratings, Semi-Steel Registers, Ventilators, Borders, Side Wall and Base Board Registers

THE WALWORTH RUN FOUNDRY COMPANY

West 27th St. and N. Y. C. & St. L. R. R., Cleveland, O.

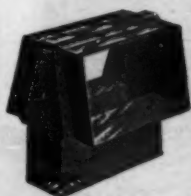
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Established

1902



CHICAGO FURNACE PIPE AND FITTINGS



All Sizes and Shapes



For Satisfaction *all the time* and high quality and price.

YOU don't have to fuss with pipe—the latest type of machinery makes Chicago Pipe accurate fitting. The design is correct too and you'll like the weight and quality of Chicago Pipe the more you use it.

It's strong and well made. You'll know why Chicago Pipe is such a big favorite when you examine its quality and construction and compare its price with other makes.

Write for Price List Today.

CHICAGO FURNACE SUPPLY CO.
1276-78-80-82 Clybourn Ave. CHICAGO

THE BIG OPPORTUNITY for 1926 For FURNACE JOBBERS

Lies in
the
Agency
for

Grand

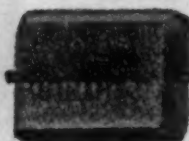
Warm
Air
Furnaces

Secure It Before It Is Too Late

Unrivalled Production Facilities Enable Us to Offer You a Furnace, Unequalled in Finish and Mechanical Precision—and at a Reasonable Price.

The Cleveland Co-operative Stove Co.
East 67th St. and Central Ave. Cleveland, Ohio

A big seller!



Write for
Prices and
Circular

WAYNE WIRE

FURNACE BRUSH

This brush used occasionally saves many times its cost in a single winter. Durable construction, four-foot flexible wire handle, brush is round steel wire. Get details today and ask about our "Art" Register Shields which prevent streaked walls.

Manufactured by

HARDWARE SPECIALTY COMPANY
221 East Berry Street Fort Wayne, Indiana

BOOMER

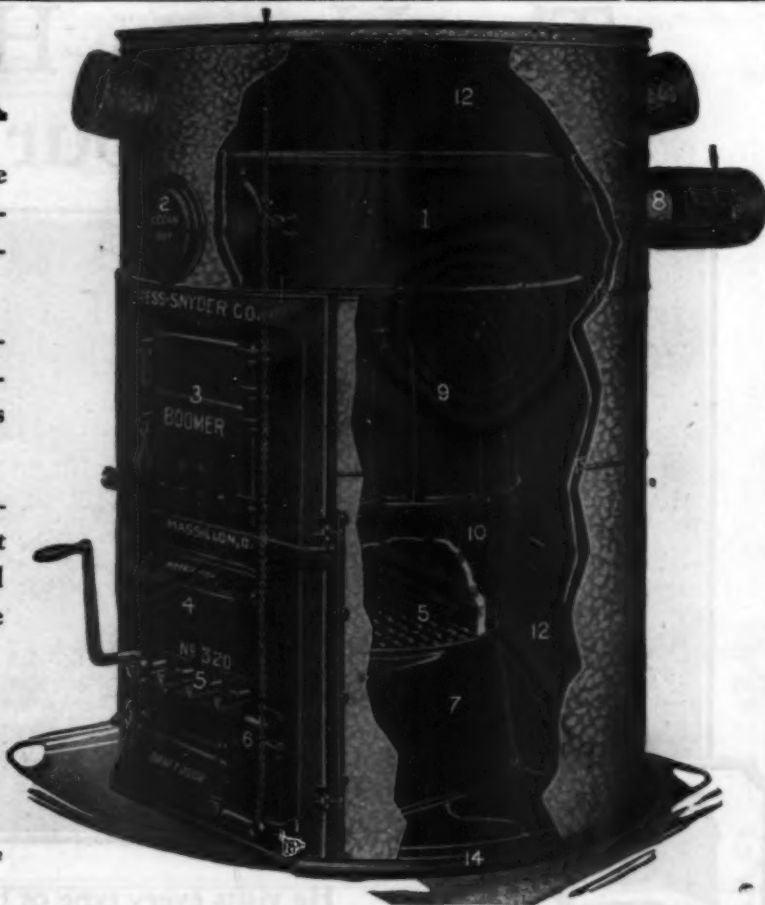
THIS is our latest addition to the Boomer line. We heartily recommend it for your favorable consideration.

The severe tests we have given this furnace have proven its durability. The unsolicited reports we received from users last winter have been most flattering.

For durability, economy, easy to operate, easy to set up and the low price at which we offer this furnace, you will make no mistake in arranging for the agency.

THE HESS-SNYDER CO.
MASSILLON, OHIO

Makers of BOOMER FURNACES for Forty-Three Years



"American Seal" FURNACE CEMENT

*Roof Cement — Stove Putty
Plumbers Putty*

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WILLIAM CONNORS PAINT MFG. CO.
TROY NEW YORK

Established 1852

JAMES L. PERKINS

Western Distributor

140 S. Dearborn St., Chicago, Ill.

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STOVES, FURNACES
OR BOILERS—**

WE HAVE THEM

Send for Our Illustrated
Book of Order Blanks Today

**NORTH WESTERN CHICAGO
STOVE REPAIR CO. N ILLINOIS**

MARSH WOOD FACES



*The Finest
Wood Faces Made*

EVERY Marsh Wood Face is accurate, durable, artistic, and yet economical.

Highest grade selected lumber from our own forests, superior workmanship and the facilities of a large modern plant are reasons why Marsh Wood Faces are used more than any other.

*Order from your jobber. All leading jobbers
sell Marsh Wood Faces, or write today to us
for our latest catalog and price list.*

The Marsh Lumber Co.
DOVER, OHIO

The Unseen Hand that Robs Your Till!



He visits every type of business, talking unbelievable profits and fabulous savings, intriguing with his gilded promises—yet robbing with his unseen hand the very till his promises would fill to overflowing. "Buy cheaply" is the slogan of False Economy. Beware of him!

Compare Lamneck Products with others in appearance, in materials, gauge and workmanship. Put them together. See how snugly and sturdily they fit. Do this. Write for a sample. Get our catalog. Just fill in or pin to your letterhead and—

**Mail This
Coupon Now!**

THE W. E.
LAMNECK CO.

Gentlemen:

Kindly send me at once, free and without obligation, the items indicated below:

() Your New Catalog.

() Sample of

Name

Address

THE dangerous thing about price buying is that business men who do it pride themselves on their good judgment, whereas, too often, they merely play into the hands of False Economy. Too often, even though buying for less, they actually pay far more at the outset than the cost of good products, and many times more in the trouble that follows.

Lamneck Pipe and Fittings challenge comparison from any standpoint. They are sold at quantity production prices and as cheaply as good products can be sold. It is an economic impossibility to make pipe and fittings as

good as the Lamneck Line and sell them for one penny less.

They are designed by skilled engineers, made by expert labor and turned out on machinery especially designed for the purpose. They are the best that skill, experience and good materials can make.

Back expert wormanship with the special patented features of Lamnecks that save valuable time, trouble and come-backs, and add to that Lamneck-48-Hour-Service and you have every reason for standardizing on the Lamneck Line.

THE W. E. LAMNECK COMPANY

416-432 Dublin Ave., Columbus, Ohio

Western Representative: THE QUICK FURNACE & SUPPLY CO., Des Moines, Iowa

LAMNECK PIPE AND FITTINGS

When writing mention AMERICAN ARTISAN—Thank you!

Write Today for Your **FREE COPY** of This Booklet

THIS interesting, instructive booklet on "The Proper Use of Pecora for Furnace Installations" tells you not only how to use Pecora, but *why* you will want to use Pecora. Remember that Pecora is used by the majority of Furnace Manufacturers and installers—that it has been the favorite for over sixty years and that it is sold by leading jobbers everywhere.

Write for the booklet today---no obligations, of course

PECORA FACTS

- 1—Iron will melt where this cement will stand.
- 2—Makes a permanent tight joint.
- 3—Pecora is odorless.



PECORA FACTS

- 4—It is easy to use and economical.
- 5—Does not shrink in joints.
- 6—No waste in the package.

PECORA PAINT CO.

Established 1862
by Smith Bowen

4th and Erie Avenue
PHILADELPHIA, PENNA.

Incorporated
1911

BOLTS

WE MANUFACTURE A COMPLETE LINE OF BOLT PRODUCTS, INCLUDING STOVE BOLTS, CARRIAGE BOLTS, MACHINE BOLTS, LAG BOLTS, NUTS, ETC. ALSO STOVE RODS, SMALL RIVETS AND HINGE PINS, CATALOG ON REQUEST.

THE KIRK-LATTY MFG. CO.
1971 W. 85th St. Cleveland, O.

**IRON AND WOOD
STOVE PATTERNS**
QUINCY PATTERN COMPANY
QUINCY, ILLINOIS

**PATTERNS FOR STOVES
AND HEATERS**
THE CLEVELAND CASTINGS PATTERN COMPANY
CLEVELAND, OHIO

P A T T E R N S
FOR STOVES AND HEATERS
VEDDER PATTERN WORKS
FIRST-CLASS IN WOOD and IRON
ESTABLISHED 1835 TROY, N. Y.



Stove Trimmings and Metal Stampings

A complete line of standard Stove Trimmings and facilities for making any special designs.

Let us quote you on any metal stampings that you may need.

THE
**AMERICAN TUBE & STAMPING
COMPANY**
BRIDGEPORT CONNECTICUT

Mention *AMERICAN ARTISAN* in your reply—Thank you!

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the
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Sheet Metal, Roofing,
Stove and Hardware
Industries

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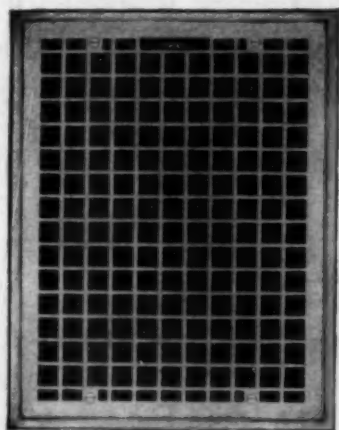
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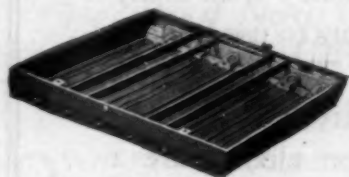
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AN INVITATION

AMERICAN ARTISAN courteously invites and urges you to participate in the privileges and benefits of its Service Departments. Any phase of the warm air heating and sheet metal industries or stove sales and window display questions may be profitably and instructively discussed in its pages. If your problem is a knotty or technical one, submit it to the Service Department and secure the benefits of the opinions of other men. It is an exchange information department, and you are asked to relate your accomplishments and tell how you have surmounted difficulties. Wherever possible rough sketches or photographs should accompany the questions or suggestions, as they always make clear the point involved. Use these Service Departments freely; they are yours.



Style 70
All-Steel Register



All-Steel Bottom

A Face Shoes Can't Push In

THE faces of T&B Registers are heavy and strong enough to stand the wear and tear of rough usage. Put them where you will, exposed positions in hallway or nursery, and they'll show shoes and furniture the stuff they're made of.

Twelve gauge steel, that's what it is. Heavier than necessary in some cases but we like to play safe—for your sake as well as our own.

For example—take the bottom of these registers. We put four re-enforcing bars under the face. Just an extra margin of safety. Don't forget either that this is a bevelled bottom—the only one on the market. Easy fitting makes easy work.

We'll gladly send you a catalogue of the T&B line—steel, semi-steel, and cast registers all made by us.

TUTTLE & BAILEY MFG CO.

Makers of Registers for 80 years

36 Portland Street, Boston

441 Lexington Avenue, New York

1123-29 West 37th Street, Chicago

704 East 18th Street, Kansas City

Bridgeburg, Canada

T & B Registers and Grilles



Avoid trouble! Use Lupton perfect-fitting elbows

A SMALL annoyance like a poorly fitted elbow can make a customer dissatisfied with a whole job. Only by using the best of materials can the contractor hope to give satisfaction and increase his business.

So it is a matter of policy with many sheet metal contractors to use Lupton elbows exclusively. They find that the reliable uniformity, close fit, and long wear of Lupton elbows are a source of permanent satisfaction.

Specify Lupton Elbows to Your Jobber

DAVID LUPTON'S SONS COMPANY
Allegheny Avenue and Tulip Street, Philadelphia

LUPTON

ELBOWS THAT FIT



American Artisan and Hardware Record



Vol. 91.

CHICAGO, JANUARY 30, 1926.

No. 5.



Exterior Front View of Geers Apartments, 14th and Broadway, Oklahoma City, Oklahoma, Upon Which Horse Head Zinc Roof Was Placed

Expansion and Contraction Factor Effectually Overcome in Geers' Apartment Zinc Roof

Roof Now Giving Satisfactory Service in Oklahoma City Where Climatic Changes Are Frequent and Violent

By GEORGE J. DUERR

OWNERS and architects of the better class of buildings are realizing more and more that the best materials for their buildings are the cheapest in the long run. The depreciation on a building caused by the elements is a factor which often spells success or failure to the venture. Of course, where a man erects a building for purely speculative purposes, that man pays little or no heed to the quality of materials used. The cheaper the better is his slogan from first to last. He aims to sell the building while still new and so materials concern him the least.

On the other hand there are men who put money into buildings for

conservative investment purposes. The idea in the minds of these men is to erect substantial buildings. They have a true concern about the quality of materials that go into these buildings. It is to their advantage to use forethought and discretion in the selection of these materials. They require that the value of their investment remain as near constant as possible. In order to do this they are almost compelled to use everlasting materials wherever these latter will be exposed to the elements.

An instance of where this very thing has occurred is supplied in the accompanying illustrations. These present to the reader two

views of the Geers Apartments, 14th and Broadway, Oklahoma City, Oklahoma.

A great deal of talk has been expended upon the impossibility of successfully laying a sheet zinc roof, gutters and down spouts. The main argument is that the expansion and contractions of this metal are so great that no soldered joint will hold.

In England and France are zinc roofs still doing service, although hundreds of years have elapsed since they were put on.

In the old days men built for permanence as well as for beauty. We in this country build for utility. But is there any logical reason why

we should not build for permanence and beauty at the same time? None whatever. Men are realizing that fact more and more and are doing something about it.

The expansion and contraction bubble was effectually blasted in

weather changes. Officials of the company are rather proud of their success with zinc roofs in that climate, especially as every one else in the sheet metal business predicted dire results for them. L. S. Potts of this progressive firm said:



Photos Courtesy of New Jersey Zinc Company, Chicago Branch.

Rear View of Geers Apartment Showing Zinc Gutters and Downspouts

the Geers Apartments job by the B. & H. Passmore Metal & Roof Company, who did the work.

The material used was 20-inch strips of Horse Head zinc, crimped; making a standing seam roof of 18 inches between seams. This roof was guaranteed for twenty years by the contractor and at the present no trouble has been experienced, which is an assurance that the roof is taking care of the maximum expansions and contractions caused by Oklahoma's sudden

"It might be well to state, however, that we would not attempt to put on a zinc roof of any description, excepting zinc shingles, unless the material used was Horse Head zinc."

The members of the B. & H. Passmore Metal & Roofing Company, 110 West Reno street, Oklahoma City, Oklahoma, are Hollis and Burnice Passmore. The firm is a co-partnership and has been in the sheet metal and roofing business for eight years in February.

On the other hand, a line of credit that represents an extremely small investment for material and labor and which serves to broaden the distribution of overhead costs, can be safely treated in a more liberal fashion, because volume sales, in this instance, if properly financed, can absorb a larger percentage of bad debts.

In many instances the credit manager is not familiar with the costs and financial movements of his company. When this is the case, he is not qualified to decide the credit policy.

Third: Management knows the breakdown of the costs; what portion is applicable to factory, administration and selling. A credit policy that might minimize the cost of operation of the credit department, and that will maintain a small loss through bad debts, may create corresponding increases in selling costs.

Fourth: Management should dictate to what extent salesmen are to assist in collections. In some lines it may be advisable to have the salesmen's assistance with all accounts that cannot be collected through the ordinary collection procedure. In other lines, it may prove to be good policy to keep all collection matters from the salesmen so that they will have no occasion for discussion of a matter that is disagreeable to the customer.

Fifth: When it is necessary to delegate responsibility to district sales offices or salesmen, in the extension of credit, management should decide to what limit this authority extends; and the credit man should analyze his write-off to determine as accurately as possible, the cost of this policy so that management can increase or decrease the limit of authority.

Sixth: Closest co-operation should be developed between the sales manager and credit manager, particularly when the question of credit restriction arises, when the account under consideration is an old customer of the house, or perhaps a new customer with strained working capital. There is so much

Six Reasons Why Management Should Decide Credit Policy

Read Them Over and See If Your Practice Conforms To Them

THE management generally should decide upon the credit and collection policy that is to be followed by the credit department of a business. The decision should not be left to the credit manager to work out, for several reasons:

First: Management must decide in advance what portion of its investment can be allocated to finance the accounts receivable. The figure decided upon should be sufficient, at the low ebb of the business, to permit of clearing the bank lines, and should be sufficiently high to

enable the prompt payment of its obligations, with the aid of the bank lines, when sales volume is at the highest peak.

Second: The margin of gross profit that is earned on the sales must be carefully considered. If in extending a credit line of one thousand dollars, \$600.00 represents labor and material, the credit policy should not allow of a large percentage of bad debts, as each dollar lost represents 60 cents of invested capital, excluding the portion of overhead that is also to be absorbed.

business to be had with slow-pay accounts that it is wise to give them individual consideration. It is, in

fact, with this class of accounts that the credit man largely develops his value of importance to his company.

Owensboro, Kentucky, Sheet Metal Men Show They Are "Live Bunch"

Give an Example of What National Sheet Metal Delegates Will Receive at Louisville

SOUTHERN hospitality has won a place for itself in the sun. Nor do the southerners experience any difficulty in maintain-

and Frey, W. C. Bolling—to spend a week with them at a fishing camp on Green river. Some forty members of the Louisville local left

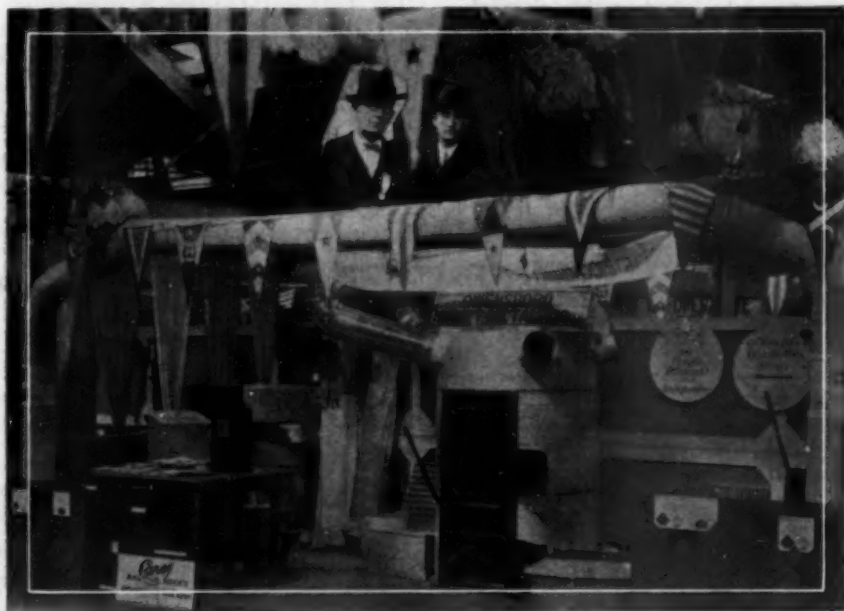
night as guests of these members and the Illinois Central Railway Company sent with them one of its traveling representatives. The pullman was placed on a side track for the convenience of the members. The railway representative returned with the boys on the following Monday morning. (We're not inferring that they needed him).

These four members of the Owensboro local, together with C. F. Lutz, a sheet metal contractor of Henderson, Kentucky, and Mr. Becker, of the Ohio Valley Roofing and Supply Company, made this trip one which the Louisville boys will never forget.

No visitor was allowed to spend any money whatever for any purpose and each and every one of the forty Louisville members attending came back with the hiccoughs and indigestion. These side remarks are only to emphasize the spirit of Kentucky's hospitality and co-operation.

The accompanying illustration is that of a display made by J. F. Mattingly and H. L. Bennett, proprietors of the Owensboro Sheet Metal Works, staged at the Industrial Exposition which was at the time of the Louisville invasion of Owensboro being held.

O. E. Huchison, of Kirchdorfer-Hutchison Company, visited this exposition and asserted without hesitation that the display of the Owensboro Sheet Metal Works was the most attractive display in



Display Made by Owensboro Sheet Metal Works. Inset, Mr. Mattingly and Mr. Bennett.

ing that enviable reputation. It's a gift with which they are just naturally born. They can no more get away from it than Mr. O. E. Huchison can get out of the sheet metal contracting business.

The spirit of cordiality radiates from them. As an example of that brotherly spirit the facts given below are presented. The story contains a moral which sheet metal men in other parts of the country might well heed. It also gives the reader a hint of what he can expect at Louisville next May.

Last summer the members of the Louisville Local Sheet Metal and Roofing Contractors were invited by the local members of the Owensboro organization — Albert F. Laub & Company, Owensboro Sheet Metal Works, Southworth

Louisville on Friday evening, chartering a pullman. They spent Saturday, Sunday and Sunday



Louisville and Owensboro Sheet Metal Men on Outing.

the entire exhibit. Other business people in Owensboro and traveling salesmen were vociferous in assert-

ing that the Owensboro Sheet Metal Works has already been repaid many times over for the ex-

penditure made on this exhibit. The Owensboro Sheet Metal Works is proud of its achievement.

Sketch Shows the Erection of a Warm Air Heating Duct

Herein Is Illustrated the Solution of a Problem Which Every Contractor Knows

By O. W. KOTHE, Principal, St. Louis Technical Institute, St. Louis, Missouri.

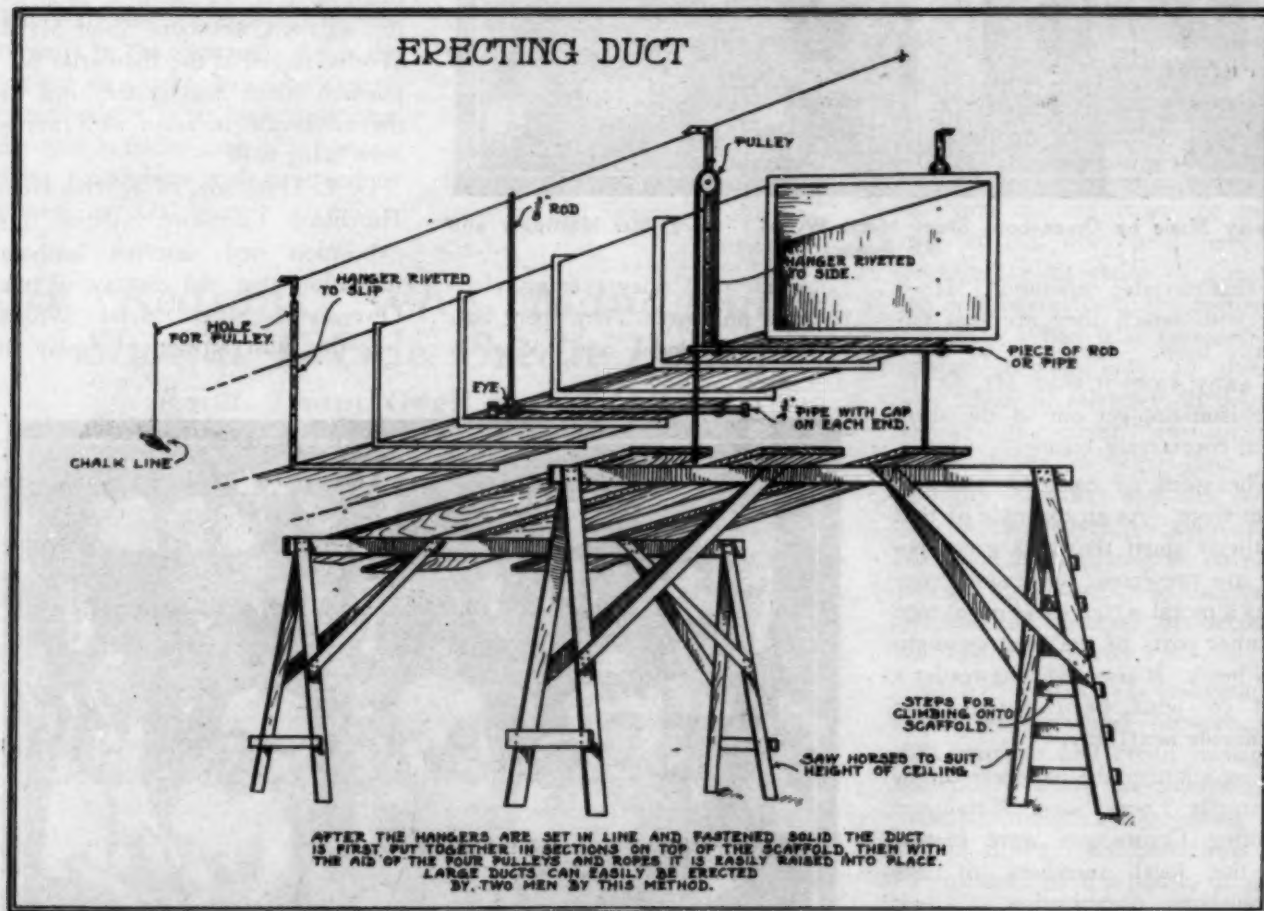
IN THE accompanying drawing we show another design by our friend, Harry J. Ringwood. I am rather proud of Mr. Ringwood's development, and the good work he is accomplishing. It is not alone in the erection field, but it is also rapidly entering the engineering field. The expression of ideas is the first condition and as this condition is developed further progress is always made.

There are many different ways of erecting ducts, especially the larger ones which are always very cum-

bersome and awkward. Some folks use helpers, thereby having from four to eight hands to do the job, while others work only as a mechanic and helper or apprentice, or two mechanics to where they have a sort of crossboard brace that they prize the duct in position and hold it there until secured. In this case we show a little easier method which in many respects shows good erection. A chalk line is used for centering the hangers which in this case appear to be put in with expansion bolts or they can be run

through the ceiling by means of rods. The ducts are raised in position by attaching small pulleys to the hangers, one on each side, and using a rod or pipe at the bottom and so heed the duct in place. This is much easier than using a person's back and arms.

Trussels are used for scaffolding, being convenient largely because of being easily moved and they can be changed in length or height as work may require. In addition we should say that workman should be very careful about scaffold boards or



Details for Erecting Ducts.

planks. There are many men who are careless in walking over planks and the plank springs up and down, which may not break at that time, but the fracture has been caused. We know of instances where planks were fractured and appeared as good as new, but when an ordinary light person would walk over they would fall down underneath them without warning. It is by such work that the majority of accidents are met with and it is generally traced to some careless person not knowing how to walk on a scaffold, or to misuse scaffold planking for other purposes where fractures are set up and then under the least adverse condition.

We should have said that ducts should be erected sufficiently strong to allow a plank being slid inside so

a person can crawl in and clean out the pipe or adjust dampers which may have disconnected or do other such repair work. This requires secure bracing, sufficient hangers and proper reinforcement. Indirect heating and ventilating ducts are subject to being laden with dust as well as many other things and so they must be cleaned out at some time or another, otherwise the dust is blown into the building and much of the purified condition is lost. Such cleaning is generally done before the heating season opens. Often a vacuum cleaner is used for the purpose or a spray of steam is used to blow the dust out if the duct is not too long. Long ducts can only be cleaned by putting a man inside. Care must be exercised not to leave tools behind.

Sheet Metal Again Proves Its Efficacy to Stay Progress of Fire

Sheet Metal Contractor Who Did Work, Making Rapid Progress

A FRAME garage and storage house and another building with sheet metal siding only eight feet away, made an ideal setting for a fire test. And sure enough, it came, according to **INGOT IRON SHOP NEWS**.

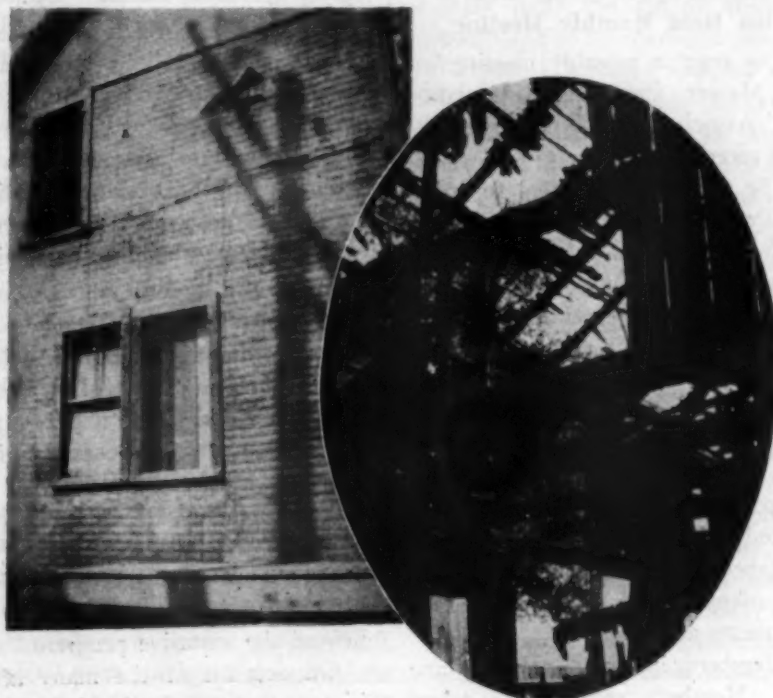
The dry wooden building with the oily waste, inflammable liquids, an automobile, and a quantity of leather linings, all contributed to the blaze, and the eager flames licked up everything in sight—everything but the sheet metal building.

The bonfire roared with the surging of the wind, and it crackled and snapped as each succeeding board and beam succumbed to devouring tongues of flame.

When the firemen finished their work, only a skeleton of the building remained to tell the story. But the sheet metal house stood unharmed save for windows that were broken or cracked by the heat.

There was a wooden sheathing beneath the sheet metal and the firemen tore a corner of one of the

sheets loose to see how the wood had fared. Apparently it was as good as ever. If you will look closely, the torn sheet can be seen in the upper half of the photo, toward the center.



Sheet Metal Covered Building Adjacent to One That Burned.

Victor Sheet Metal Works Photos

These photographs and notes were secured through the courtesy of Mr. Harold Victor of the Victor Sheet Metal Works, Long Branch, New Jersey. Mr. Victor has only been in business since February of 1924, but he is making splendid progress.

He moved into his present location at 16 Third Avenue just last September, but by means of an intensive direct mail campaign prepared through the Ingot Iron Shop headquarters, and other sales promotional efforts, his shop is already well established as "Sheet Metal Quality Headquarters." The Ingot Iron Shop sign hangs above the door.

Only Two Years in Business

Mr. Victor started about two years ago without a dollar in his pocket and only a few tools. A thorough knowledge of the business, constant plugging, and headwork, have brought their reward. And now with five or six men working for him, he is successfully bidding on all the large jobs that come his way.

Knows Value of Advertising

He is an advertiser! And he knows how to advertise to get business. It was Mr. Victor's plan to

show enlargements of the fire photos in his shop window, with a show-card calling attention to the many advantages of sheet metal for roofing and siding.

Successful business is just the natural result of taking advantage of every available opportunity to get business.

Carolinas-Virginia Sheet Metal Men to Meet Last Week in February

The fifth annual convention of the Carolinas-Virginia Sheet Metal and Warm Air Heating Contractors' Association will be held at the Hotel Richmond, Richmond, Virginia, February 24 and 25.

Richmond, the historic capital of the confederacy, offers much of interest to the visitor and the committee of Richmond contractors, headed by Reuben Burton, Jr., plans a tour of inspection to all the points of interest and to the battlefields around the city.

An interesting program, filled with intelligent discussions of problems vital to the sheet metal industry in the association's territory is being prepared by George I. Ray, president.

Twenty-one Members of Milwaukee Sheet Metal Association Hold Monthly Meeting

The regular monthly meeting of the Master Sheet Metal Contractors' Association of Milwaukee was held recently.

The meeting was called to order by President Joseph M. Hollitz at 8:15 p. m. There were 21 members present. A motion was made and carried that the secretary write the Bergstrom Stove Company requesting them to have a representative at the next meeting regarding selling direct.

A committee consisting of R. Jeske and William Hammann submitted a list of proper specifications for sheet metal work which are to be submitted to city and other architects and builders.

Members in good standing are 44. Members resigned or taken

from roster for non-payment of dues are 3; members still owing dues are 4; roofer members in good standing are 5.

Mr. Bogenberger gave a report on the Employers' Council. The following officers were elected for this association for the year 1926: T. E. Tonnsen, president; A. Schuman, first vice-president; A. Goethal, second vice-president; Art H. Podolske, secretary; Henry Pluckhan, treasurer; A. Graunke, sergeant-at-arms; and R. Jeske, Walter Bogenberger and Joseph Hollitz, executive committee.

Business meeting adjourned at 9:45 p. m. and all members went over to the Blatz Hotel where refreshments were served.

Michigan Sheet Metal Convention Plans Progressing Rapidly

A special meeting of the Battle Creek Sheet Metal Contractors' Association was held in the office of Shoullice Brothers' Sheet Metal Works, Friday night, January 22nd, to discuss plans and arrangements for the annual convention to be held in Battle Creek, March 1-2-3 and 4. Reports from the various committees were accepted and favorably passed upon, according to Secretary Frank Ederle.

The surprises which are in store for attendants at the convention prevent any disclosures, but this much may be said, Battle Creek started the state association and is sufficiently proud of its accomplishments not to leave a stone unturned to provide a suitable home-coming.

John Darlington & Company, charter members of the state association are directing activities, which with the help of Jim and Lon Shoullice, Bill Lusk, Guy Fitzgerald and Pete "Nigger" Jones, expect to furnish the best entertainment ever offered the organization.

Homer Brundage, State President, attended the meeting to lend his careful judgment. Homer approved the tentative program.

On account of the many activities of the organization it has been

found necessary to employ an assistant for the secretary, and it is announced that D. H. (Gus) Ederle was the victim selected.

Pecora Paint Company Elects S. B. Bowen President

The sixty-third annual meeting of the stockholders of the Pecora Paint Company was held in the company's meeting room in Philadelphia, Pennsylvania, on January 18th. The following officers were elected to serve for the year 1926: President, S. B. Bowen; vice-president, S. B. Bowen, Jr.; treasurer, J. J. Schisselbaner; secretary, J. H. Johnson. A report was made by the secretary that the company has increased its production about 25 per cent over the year 1924.

After the meeting adjourned the stockholders journeyed to the Auto Club where an annual dinner was held.

In addition to the above mentioned officers the following were present at the dinner: W. P. Werner, F. G. Pate, W. H. Evans, Lawrence Bowen.

Pennsylvania Sheet Metal Men Will Meet April 14 to 16.

The Sheet Metal Contractors' Association of Pennsylvania will hold its annual convention April 14, 15 and 16, 1926, at Williamsport. The headquarters for this convention will be at Hotel Lycoming.

New York Sheet Metal Convention Dates Changed to April 14 and 15.

The Board of Directors of the New York State Sheet Metal Contractors' Association have found it necessary to postpone the annual meeting of the association. The convention was to have been held at Elmira, New York, February 11 and 12. The new dates set for the meeting are April 14 and 15. This announcement was made by Secretary John J. Yager, 817 Sycamore Street, Buffalo, New York. A program of the convention will be issued shortly.

Excise Tax on Sporting Arms Soon to Be Repealed

Prospects are excellent for the repeal of the Excise Tax on sporting arms and ammunition and other items. The House has passed the tax bill which carries with it a repeal of the war time tax and it is expected that the Senate will concur. If there are no hitches, the tax measure will reach the President by the latter part of February and should become a law by the first of March. The Excise Tax of ten per cent on sporting arms and ammunition will cease just as soon as the President affixes his signature to the bill.

This tax has been paid by the consumers since 1919. The Government collects the tax from the manufacturer, who in turn passes it to the jobber, who in turn passes it to the retailer, and the consumer eventually pays it. National organizations interested in the conservation of wild life, trap, and rifle shooting, and hundreds of individuals appealed to Congress to erase this tax from the books, and gave excellent reasons for so doing.

The Amateur Trapshooting Association, and the National Rifle Shooting Association, dozens of state fish and game associations, rod and gun clubs, and other organizations went on record as being in favor of having the tax repealed and Peter P. Carney, representing the Amateur Trapshooting Association and the National Rifle Shooting Association; Herbert P. Sheets, secretary of the National Retail Hardware Dealers Association, and representing about thirty thousand retail hardware merchants, and C. L. Reiersen, president of the Remington Arms Company, representing the manufacturers of sporting arms and ammunition, appeared before the Ways and Means Committee and outlined the situation.

Mr. Reiersen told of the efforts of the manufacturers in behalf of the Government during war time days, and what the continuance of these plants meant to the Government. He requested that the tax be eliminated as soon as possible.

Mr. Reiersen and the other speakers were well received by the committee who had heard considerable about the injustice of the tax from the home folks.

Everyone interested in having the tax removed should write to their Senators in Washington and request their efforts in having the Senate ratify the action of the House.

Copper Consumption Large in Manufacture of Electric Refrigerators

Within the last year electric refrigeration has rapidly acquired a wide-spread importance through the linking up of co-operative effort between refrigeration manufacturers and electric power companies.

Recent spectacular development of this system of refrigeration again shows the dependence of modern civilization upon copper. It is estimated that the iceless refrigeration units which will be manufactured this year will require almost 30,000,000 pounds of copper.

Motor windings and parts, switches, wiring, etc., of the electric and mechanical equipment used, of course, are of copper. Compressor parts, tubing, tanks, etc., must be of copper in order to handle properly the liquids and gases used as refrigerants, and in ice cream boxes large amounts of sheet copper are used for tanks and tank covers.

The great advantages of household electric refrigeration are its automatic and steady operation, its ability to maintain a lower temperature of dry cold with entire absence of moisture, drip and dirt, and its better conditioning of refrigerated food.

Parallel with household refrigeration has developed iceless storage of ice cream for confectionery stores, soda fountains and restaurants, which uses essentially the same equipment, and give the same advantages of even, dry cold. The prospects for electric refrigeration extend even further and include the florist and fine fruit trade, milk

cooling, as well as certain processes of food manufacture.

Considering only the household market for electric refrigeration, the possibilities for this growing industry are enormous. In the last five years unit sales have doubled each year, and still less than 1 per cent of the market has been sold. With nearly 20,000,000 ordinary refrigerators now in use, and over 12,000,000 homes already wired for electricity the number of electric refrigerators in household service alone should soon reach the washing machine total, which is figured at nearly 4,000,000.—*Copper & Brass Research Bulletin.*

The Man Who Delivers the Goods

There's a man in the world who is never turned down, wherever he chances to stray; he gets the glad hand in the populous town, out where the farmers make hay; he's greeted with pleasure on deserts of sand, and deep in the aisles of the woods; wherever he goes there's the welcoming hand—he's the Man Who Delivers the Goods. The failures of life sit around and complain; the gods haven't treated them white; they've lost their umbrellas whenever there's rain and they haven't their lanterns at night; men tire of the failures who fill with their sighs the air of their own neighborhoods; there's a man who is treated with love-lighted eyes—he's the Man Who Delivers the Goods. One fellow is lazy and watches the clock, and waits for the whistle to blow; and one has a hammer with which he will knock, and one tells a story of woe; and one, if requested to travel a mile, will measure the perches and rods; but one does his stunt with a whistle or smile—he's The Man Who Delivers the Goods. One man is afraid that he'll labor too hard—the world isn't yearning for such; and one man is alert, on his guard, lest he put in a minute too much; and one has a grouch or a temper that's bad; and one is a creature of moods; so it's hey for the joyous and rollicking lad—for The Man Who Delivers the Goods.—*Walt Mason.*

Conzelman Finds Many Heating Engineers Like the Old Irishman

A. Conzelman, manager of Round Oak Heating Company, Streator, Illinois, makes the following comment on the title "Heating Engineer":

"Ninety-nine per cent of the so-called 'heating engineers' are like this Irishman:

"A couple of years ago, in company with another furnace installer, we drove over to a neighboring city to get a few fittings which we were short.

"The neighboring installer, when we called, was talking to an old Irishman in his shop. This installer always admitted that he was a heating engineer. He introduced my friend to the Irishman, informing

him that he, too, was a heating engineer. Then he introduced me, also telling the Irishman that I was a heating engineer.

"So," said the neighboring installer, 'there are three heating engineers here.'

"There are four heating engineers here," said the old Irishman, 'for I have been firing boilers for forty years.'

H. S. Durant Becomes Manager Cold Rolled Department American Steel & Wire

H. S. Durant has been appointed manager of the Cold Rolled Strip and Spring Sales Departments, American Steel & Wire Company, Chicago. Mr. Durant takes the place of Lewis Johnson, deceased.

ward, Chicago, Illinois, and Philadelphia, Pennsylvania.

Automobile Radiator Supplies

From E. W. Hiatt, Sarasota, Florida.

Please tell me who makes automobile radiator supplies, especially rubber expansion plugs.

Ans.—The F. L. Curfman Manufacturing Company, Maryville, Missouri.

Instrument to Measure Humidity

From W. H. Hilger, 903 West Garfield boulevard, Chicago.

Can you tell me who makes an instrument to measure humidity?

Ans.—E. Vernon Hill Company, 64 West Randolph street, Chicago.

Chicago Firm Making Electrical Fixtures and Bird Cage Stands

From Charles F. Hauck and Company, 59 West Main street, Springfield, Ohio.

There is a firm in Chicago manufacturing electrical fixtures that have taken up making bird cage stands. Can you tell us who this firm is?

Ans.—Marshfield Lamp and Brass Manufacturing Company, 1742 Haddon avenue.

Skuttle Improved Automatic Humidifier.

From Quaker Manufacturing Company, 140 North Dearborn Street, Chicago.

Will you kindly inform us who makes the Skuttle Improved Automatic humidifier?

Ans.—Marshalltown Manufacturing Company, Marshalltown, Iowa.

Chicago Office of Cleveland Laundry Machinery Company

From E. T. Glass, 5009 Lake Park avenue, Chicago, Illinois.

Can you tell me if the Cleveland Laundry Machinery Company, Cleveland, Ohio, makers of the "Cleveland" laundry dryer, have a Chicago office?

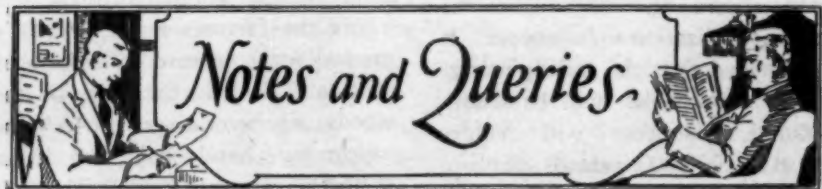
Ans.—They have a representative at 3631 Broadway.

Chimney Draft Gauge

From Charles F. Hauck and Company, 59 West Main street, Springfield, Ohio.

Please tell us if there is an instrument made to measure what draft a chimney has.

Ans.—Yes; it is made by E. Vernon Hill Company, 64 West Randolph street, Chicago.



Aluminum Sheets

From J. R. Jones, Ames, Iowa.

Please inform me where I can buy aluminum sheets 7 by 2 feet.

Ans.—Aluminum Company of America, 360 North Michigan avenue, and Fuhrman and Lundberg, 444 West Grand avenue, both of Chicago, Illinois.

"Kohler" Stove Pipe Cutter

From The Warnke Brothers Company, 305 Nebraska avenue, Toledo, Ohio.

Can you tell us who makes the "Kohler" stove pipe cutter and crimper?

Ans.—Kohler Manufacturing Company, 1923 Carson street, Pittsburgh, Pennsylvania.

Steel Damper Clips and Pulleys

From F. H. Berger, Salem, Oregon.

Can you tell me who makes steel damper clips and steel furnace chain pulleys?

Ans.—1. Carr Supply Company, 414 North Dearborn street, Chicago, Illinois, and Parker-Kalon Corporation, 352 West 13th street, New York City. 2. Federal Manufacturing Company, Holland, Mich-

igan. You may obtain both these items from Chicago Furnace Supply Company, 1278 Clybourn avenue, Chicago.

Stamped Milk Can Bottoms

From Oak Lykins Sheet Metal Works, Bixby, Oklahoma.

Kindly tell me who makes stamped milk can bottoms.

Ans. — Solar-Sturges Manufacturing Company, Bellwood, Illinois, and Buhl Stamping Company, Detroit, Michigan.

Stamped Galvanized Can Bottoms

From Porter's Hardware, Ogallala, Nebraska.

Please advise me who makes stamped galvanized can bottoms.

Ans.—Buhl Stamping Company, Detroit, Michigan.

Steel Reversible Ventilator Windows

From Cochran and Black, Hot Springs National Park, Arkansas.

Please give us the name of a steel sash firm that makes a product similar to the Fenestra reversible ventilator windows.

Ans.—David Lupton's Sons Company, 28 East Jackson boule-

The Editor's Page

Developing Latent Dealer Interest in Product

DURING a sales convention held recently by one of the large manufacturers of warm air furnaces a somewhat unusual procedure was in vogue. Warm air furnace dealers were treated to a 3-day course in heating and ventilating problems.

That was a commendable innovation and the man or men within the organization responsible for its occurrence deserve full credit for the idea.

Many of the dealers responded to the invitation, defraying their own expenses in order that they might have certain problems which confront them in their work cleared up.

Such dealers as did respond to the invitation are not ordinary dealers. They are researchers. They are men intensely interested in the work they are doing. They are men who are reaching out for further information to assist them in the work they are doing. They will go far in their profession because they have receptive minds and a willingness to learn at every opportunity that offers.

You say, certain men have difficulty in making sales. An analysis of their attitudes will generally reveal the fact that they do not know their own jobs thoroughly. They are not interested enough to provide themselves with the specialized knowledge which they must have in order to do efficient work. The result is that they are not convincing when they talk to a prospective customer. Their enthusiasm is not contagious. Sales do not follow sales effort as often as they should in the natural course of events. Discouragement follows.

The manufacturer should do all in his power to ferret out and develop the latent natural interest in his products of his dealers. By so doing he will materially reduce his list of mortalities—thereby cutting down to a considerable degree his cost of distribution. He should aim at permanence in his dealers.

It is true that the manufacturer's salesmen do a great deal of missionary work. But these men are so situated in the chain of distribution that they cannot possibly do it all. Other means must be found to instruct the dealers who want such instruction.

The manufacturer referred to has hit upon a plan that will go far toward accomplishing the desired purpose. It has not only the virtue of solving problems for dealers, but it tends to classify the dealers separating the willing ones from those who show by their absence that they are not interested. The latter is by far the more important.

There can never be the contact between manufacturer and customer—dealing direct—that there is possible between local dealer and his customer.

If the dealers do not produce the results desired by the manufacturer, it is partly the manufacturer's own fault for not showing more interest in the dealer and his qualifications for discharging his responsibilities.

Putting Standard Code Into Building Ordinances

WARM air furnace installers are beginning to see the necessity for local organization. They realize that they can get farther along the road of progress individually with joint action, than they can by going it alone. They have not come to this conclusion without bitter experiences, however.

At a recent meeting of the Cook County Sheet Metal Club—a comparatively young organization in existence only some six months—one was struck with the earnestness of purpose of this organization. To begin with the membership attendance—some 45 men—was almost 100 per cent. The business proceedings were carried out in strict accord with Roberts' Rule of Order.

The association, comprising as it does at the present time only a small portion of the city of Chicago, is now making plans for the establishment of branch No. 2. Soon the entire city of Chicago will be thoroughly organized. Under these conditions it requires little imagination to realize the tremendous power for the doing good the association will have.

One of the first problems which the association as a whole should undertake is the revision of the Chicago Building Code so as to include the Standard Furnace Code. That admittedly presents some job. But it can be accomplished if the force of an entire organization is put solidly back of the project. Men in cities like Omaha, Columbus, Indianapolis and others have been successful in this respect. These men would, no doubt, be glad of an opportunity to assist other cities that are trying to accomplish like results.

Methods of procedure in getting the Standard Furnace Code accepted in municipal building ordinances are many. The one recognized, however, as being most provocative of results is that which appeals to the individuals who head the various city departments.

Ask the chief of the fire department of your town whether or not he would endorse a code that would reduce the number of fires to minimum. He may think you have some "game" you're trying to work, but don't be discouraged. Explain the Standard Furnace Code to him. He can't fail to see your point if you persist.

Ask the chief of the city health department if he would endorse an article in the city's building code which made for better health conditions in the homes of the city. If necessary take these gentlemen around to a few furnace installations which do not conform to Standard Furnace Code precept. Pick out some good "ripe" ones. Then show how the code will eliminate all such practice.

The editors of local papers are other lions you can tackle, in order to work up public sentiment favorable to the Code. If you can get public sentiment strongly back of you, your battle with any political "machine" will be greatly minimized.

Random Notes and Sketches

By Sidney Arnold

"The essence of humor is sensibility; warm, tender fellow-feeling with all forms of existence."—Carlyle.

"It seemed," said Paul Biersach, seated in his favorite chair, "that when Rastus and Sam died they took different routes, so when the latter got to heaven he called Rastus on the phone.

"'Rastus,' he said, 'how yo' like it down thar?'"

"'Oh, boy! Dis here is some place,' replied Rastus. 'All we have to do is to wear a red suit wid horns, an' ebery now an' den shovel some coal on de fire. We don't work no more dan two hours out ob de twenty-four down here. But, tell me, Sam, how is it with you up yonder?'"

"'Mah goodness! We has to git up at fo' o'clock in de mawnin' an gathah in de stahs; den we has to haul in de moon and hang out de sun. Den we has ter roll de clouds aroun' all day long.'"

"'But, Sam, how comes it yo' has ter work so hard?'"

"'Well, to tell de truf, Rastus, we's kin' o' short of help up here.'"

* * *

Harry Beaman, president of the Indiana Warm Air Heating & Ventilating Association, is responsible for this one.

Two brothers once ran a general store in a small Western town. One of them became converted at a revival and urged the other to follow in his footsteps.

"You ought to join, Jake," said the converted one. "You don't know how helpful and comforting it is to be a member of the church."

"I know, Bill," admitted Jake, thoughtfully, "and I would like to join but I don't see how it's possible."

"Why not?" persisted the first. "What is to prevent you?"

"Well, it's jes' this way, Bill," declared Jake, "there has got to be somebody in this firm to do the weighing."

The war air heating system salesmen of the numerous manufacturing have a sense of humor to a high degree. Mr. Rankin, who travels the South for the L. J. Mueller Furnace Company, is one of those salesmen.

Here's a letter he received recently that had him stumped, however, sent to me along with several others by L. Y. McAnney, sales promotion manager.

"Dear Mr. Mueller Rankin:

"You know ve haf ben bothered wid moths or something in our clothes closets and ve nefer vas bothered until ve install de furnace. You know that a vall stack runs up thru the closet. Ven da installer vas putting in the stack he say that he must seal it vel wid asbestos paper, so B.t.u.'s could not get out. I vas vundering if dem liddle ding in the clothes could be a few stray B.t.u.'s vat might have escaped. Da look vary much like a moth only da hop. If B.t.u.'s hop and look like moth, send me some B.t.u. killers; for I like your furnace but h—I wid the B.t.u.'s if da are going to get in my good Sunday clothes."

Perhaps Mr. Rankin or Mr. McAnney can tell me what they did about it. It would certainly be interesting.

* * *

R. W. Menk one night found himself obliged to remain in a small town on account of a washout on the railroad caused by the heavy rain, which was still coming down in torrents. Mr. Menk turned to the waitress with:

"This certainly looks like the Flood."

"The what?"

"The Flood. You've read about the Flood and the ark landing on Mount Ararat, surely."

"Gee! Mister," she returned, "I ain't seen a paper for three days."

Here's one that could happen and no doubt has happened to many men in the sheet metal industry.

"Let me kiss those tears away, sweetheart?" he begged tenderly.

She fell into his arms and he was very busy for a few moments. But the tears flowed on.

"Will nothing stop them?" he asked, breathlessly.

"No," she murmured. "It's hay fever, but go on with the treatment."

* * *

U. Steindorf of the Unishear Company, New York City, was stopping at the Drake Hotel this week. Mr. Steindorf came to Chicago to attend the Midwest Engineering & Power Show being held at the American Furniture Mart Building, 666 Lake Shore drive, Chicago.

* * *

Physical laziness begets mental laziness. Conversely, sluggishness of mind is likely to lead to languor of body. Indolence is the most treacherous of all habits. As Sir Matthew Hale expressed it: "Laziness begins in cobwebs and ends in iron chains."

* * *

John Hay, the great Secretary of State under President McKinley's administration, was known as a poet with great power of expression. His short poems about everyday life were all like the following in beautiful sentiment:

Shine Where You Are

Don't waste your time in longing
For bright impossible things;
Don't sit supinely yearning
For the swiftness of angel wings;
Don't spurn to be a rush light
Because you are not a star;
But brighten some bit of darkness
By shining just where you are.

There is need of the tiniest candle,
As well as the garish sun;
The humblest deed is ennobled
When it is worthily done;
You may never be called to brighten
The darkened regions afar,
So fill, for the day, your mission
By shining just where you are.

Standard Furnace Code Is Installers Staff and Guide

Price Ceases to Be Obstacle Where Code Is Explained to Customer

By JAMES CHARLES ALLEN, Heating Engineer

A HEATING engineer may think many times that he has an insurmountable obstacle to overcome, especially when he is trying to sell a warm air heating job for a figure twice as high as the other fellow has bid.

If you go to a man and offer him stock in an organization of questionable merit, he will tell you it is cheap at 100 cents on the dollar; nevertheless, he is not assured of his income. If, however, you go to

loss of his income, but the loss of his principle as well; while in the other he is assured of both his principle and income.

This same condition is even more true in the warm air heating industry. A hit or miss installer may get price, but he does not give a system in return. If the customer is an inexperienced mechanic, clerk, professor or farmer who has heated his home with stoves and has never used a warm air furnace, the in-

to estimate.

To illustrate: Two rooms of equal size in the same building may require entirely different size pipes. One room may have two windows and only one side exposed. This room, therefore, may require a 9-inch run or 63 square inches of warm air. On the other hand the same size room may have two exposures, either one more window or an outside door. This room may require a 12-inch warm air run or 113 square inches capacity.

The owner of the home says: "Why does this room require only 63 square inches of warm air capacity to heat it, while the other of equal size requires 113 square inches?" The Standard Furnace Code is, of course, your answer and defense. This code is based upon experiments made in the laboratories at the University of Illinois and check for accuracy in the Research Residence under the direction of Professors Williard, Kratz and Day.

These experiments have proved that certain losses in heat take place under certain conditions—through glass, wall and ceiling. All of this you explain to your prospective customer. In other words you prove to him why you know that you can give him an installation that you can guarantee to heat his home to 70 degrees or higher if desired during certain outside temperatures. Your customer immediately feels that you know your business and confidence in you grows in his mind. He sees the one thing and that is that he is going to have a heating system in his home that will give him a certain desired uniform temperature, all this accomplished with a furnace in the basement that is large enough to do



Residence in Which Installation Was Made

that same business man with bank stock which is represented or has the backing of an organization that has a reputation for honesty and reliability, he will be more interested in the second than in the first proposition, even though the par value of the stock is \$100, while its market value is \$200. Why? For the simple reason that the one is backed by a reliable organization and the other is not. In the one case the investor risks not only the

staller may get by with price. If the customer is a man or woman who has had a furnace before, the furnace installer will be met with a group of questions that he will be hard put to it to answer, unless he knows his business.

The warm air furnace installer who gives a heating system instills confidence in his customers immediately by his thoroughness in going over the house, church, school or any other building he is called in

the work without risk or overtaxation. He forgets price.

Go, if you please, with me to the cloak department of a ready-to-wear shop. The purchaser thinks she wants a \$30 cloak. The sales lady shows her a \$30 cloak, while at the same time she brings out a \$60 cloak. The purchaser immediately sees the folly of buying the cheap cloak, for in one year's wear it will look shabby, while the \$60 garment will last much longer and in that way bring the cost much lower than in the case of the cheaper garment. If the \$60 coat lasts six years, that would be an investment per year of \$10. The cheaper coat would last only one year and your investment in this manner would amount to \$180. Which is the better buy?

It was such arguments as those mentioned heretofore that sold the job we are outlining in this article. Here is a job as it was actually laid out by a dealer who knew nothing about the Standard Furnace Code and also as it was actually figured according to the code.

What are the results? The owner of the house said his neighbor has a sun parlor which he can't heat with warm air. The owner of this job keeps his sun parlor closed up all day. At night he goes home to dinner, opens the register in the sun parlor and the door leading to it and in twenty minutes' time the sun parlor is heated to 70 degrees, even though the outside temperature is down to 26 degrees below zero.

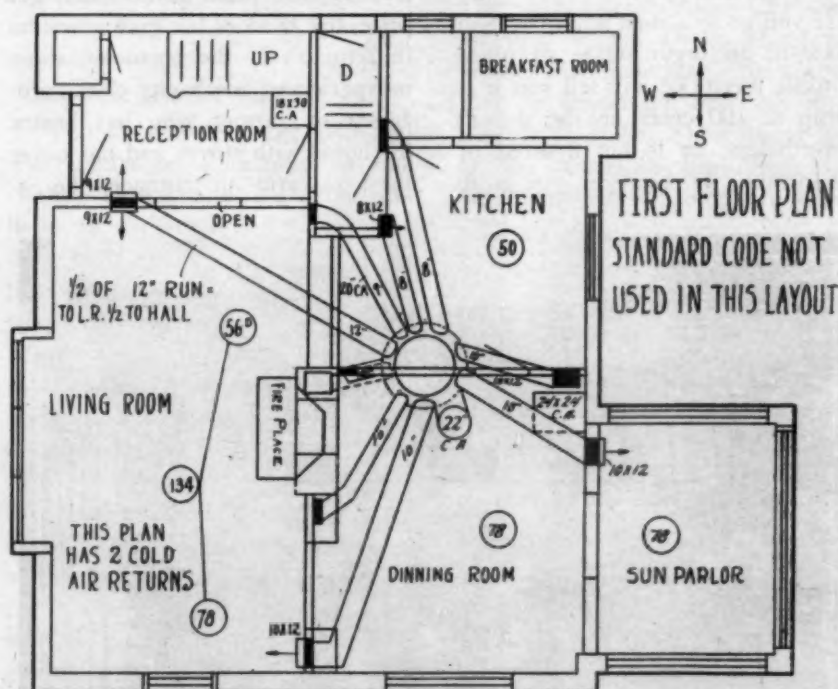
What better results than this do you installers want? After installing a warm air furnace according to the Standard Furnace Code, you won't need to lie awake at night when the thermometer registers 30 degrees below zero wondering how soon the telephone will start ringing in the complaints.

This reminds me. One day I was in the place of business of a man who had sold a ruralite a warm air heating plant some three years previous. Two of the rooms did not heat. The dealer had not tried to correct the defect. Shortly after that the farmer was looking for a sausage stuffer. After selecting

one for \$14.50, he asked the dealer what about his furnace job. He said: "You have been going to get out to my house for the past three years, but you haven't been there yet. It (the furnace) don't heat."

The dealer said to the man: "If you say nothing more about that job, I'll give you the sausage stuffer." What part of the heating system it is to be installed on in order to correct the defect, I'll let you guess.

The plan for the heating of the kitchen in the original called for 50 square inches of warm air capacity.



The plan figured according to the code called for 67 square inches of warm air capacity in the kitchen proper and 64 square inches in the breakfast room. The latter has a northeast exposure and French windows. Note that the return air is taken from this breakfast room. On the coldest winter morning this room is 70 degrees and it is not drafty.

The original plan of the sun parlor called for 78 square inches of warm air capacity. The code said 120 square inches. A 14-inch run was used here.

The original plan for the living room was very close to code requirements. The original plan called for 135 square inches, while

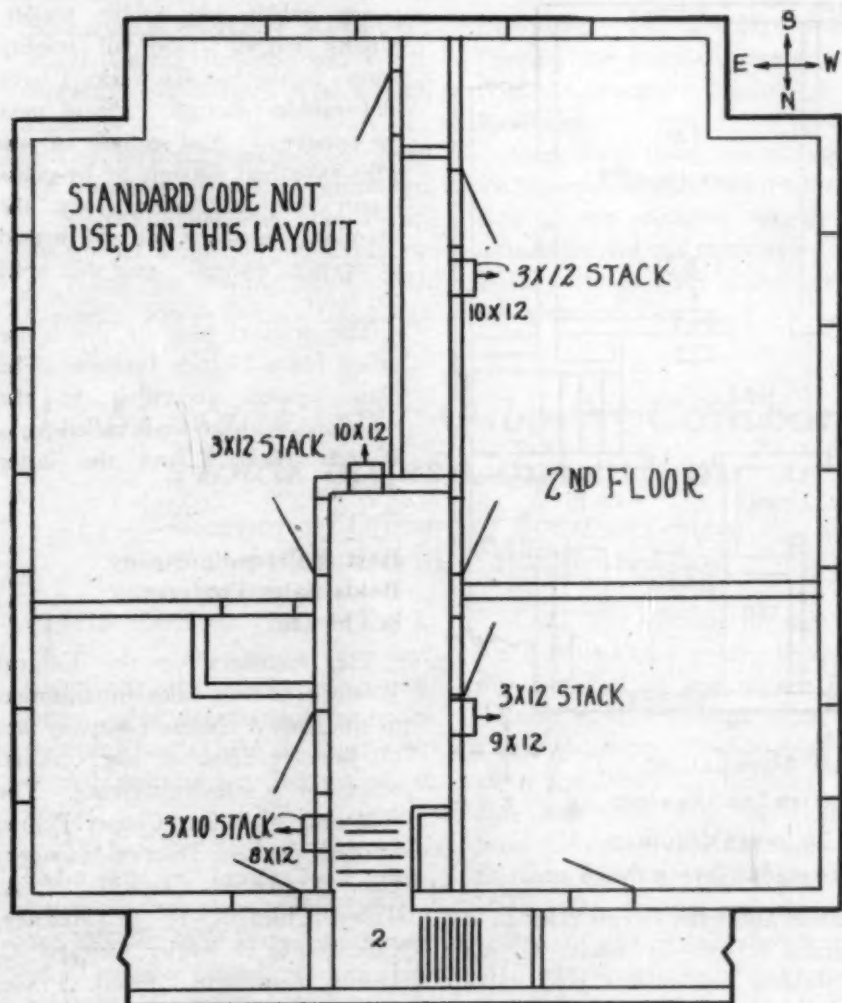
the code calls for 144 square inches. It is possible, however, to double chamber No. 1 on a 16-inch lead and chamber No. 2 on a 12-inch lead to the living room. In this way the extra runs could be cut out. The same doubling could be effected on the dining room and chamber No. 3.

The results of this installation can be summed up as follows: Register temperatures in coldest weather of from 136 to 140 were maintained by firing the furnace only once a day—that in the morning—and looking at the fire before

retiring for the night at 10 or 11 p. m. At this time the dampers were adjusted and only one shovel of coal put on the fire in extreme weather—20 to 26 degrees below zero.

The owner said: "The other evening I visited a friend's house. He complained of not being able to get a uniform temperature in his home. He could not even keep warm unless he kept feeding his furnace four or five times a day. His home is the exact duplicate of my house in all room dimensions, exposure, etc."

The whole trouble was that the runs in the friend's house were installed in accordance with the original plan. Therefore, in order to



tion and found that partitions would not permit of stacks large enough to heat the second floor. The situation was such that if I did run stacks of sufficient size, I would have to run them exposed, but back against the wall so that they could be wrapped with paper.

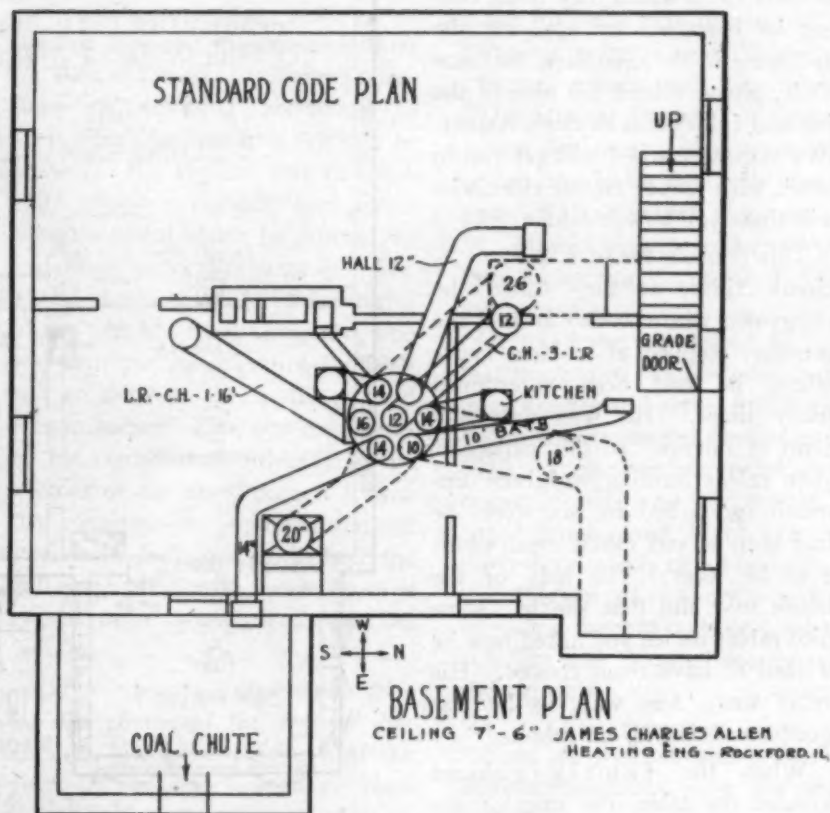
The owner said to the dealer: "Go ahead, the code looks good to me." The result was that the whole house was heated to 70 degrees in the coldest winter weather. The dealer for whom I figured this job is now remodelling another job for a relative of the first man. The second job was secured solely on the strength of the satisfactory operation of the first remodelled job. This is only one of the many instances I could relate of where the application of the Standard Furnace Code has brought business to the door of the dealer who has the courage of his own conviction in using the code.

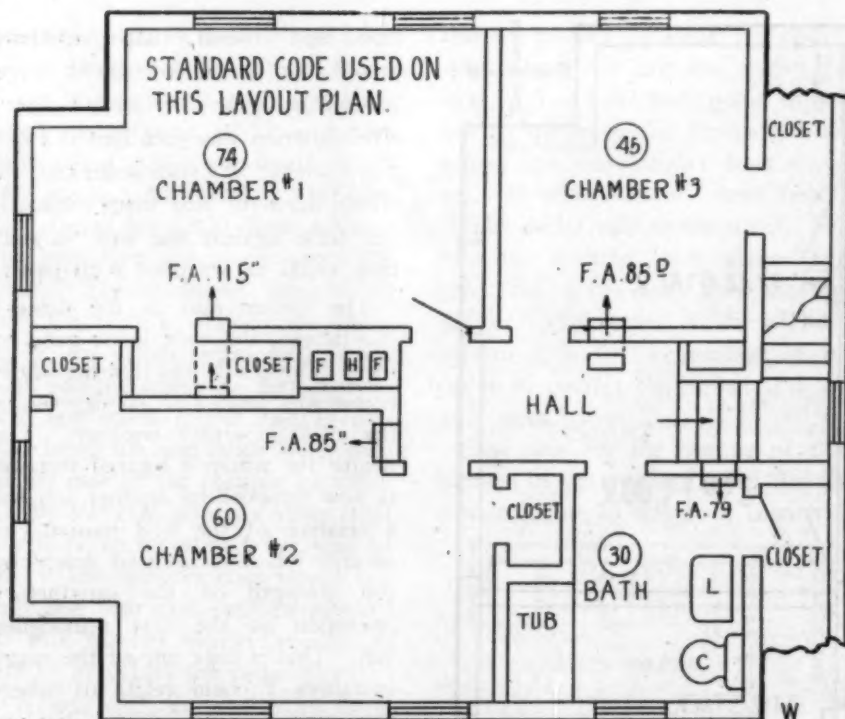
I have digressed considerably from the one job in hand, but have done it only to show how easy it is to get business on a paying basis by using the code, after you have in-

get the results he had to keep the air in his system circulating at a temperature of from 175 to 190 degrees. This, of course, necessitated more frequent firing and a higher temperature in the furnace.

From this does it appear that the furnace installers who have been working according to hit-or-miss methods should continue to do so in total disregard of the Standard Furnace Code? Have you never experienced the satisfaction derived from the enthusiasm displayed by the customer when he gets a heating plant installed according to the Standard Furnace Code? If not, you have never yet lived. All your joys are ahead of you. Here's an example:

I was called in to lay out a heating plant in an old house which had been previously heated with stoves. It was considered by everyone the coldest house in town and the hardest to heat. I examined the situa-





SECOND FLOOR PLAN 8 FOOT CEILING

JAMES CHARLES ALLEN - HEATING ENG. - ROCKFORD, ILL.

O-FIGURES IN CIRCLE ARE Sq. INCHES REQUIRED.

BY CODE TO HEAT ROOM AND ARE STACK AREA.

stalled your first job in that manner.

If any of the readers of this article have a warm air heating job in their town which they think cannot be corrected by applying the precepts of the Standard Furnace Code, please submit the plan of the job and full details through AMERICAN ARTISAN and I will get you in touch with a code circuit rider who will show you how it's done.

This reminds me of a story: "A circuit rider, as they called the clergymen who traveled around the country, stopped at a farm house where he had been entertained many times. He was unusually fond of rabbits. In this particular year rabbit hunting had been unusually good and for six weeks he had been served rabbit meat wherever he went. The lady of the house told him that she had some nice rabbit on ice and asked how he wished to have them cooked. His reply was, 'Any way, as he was pretty well fed up on rabbits.'"

When the family gathered around the table, the man of the

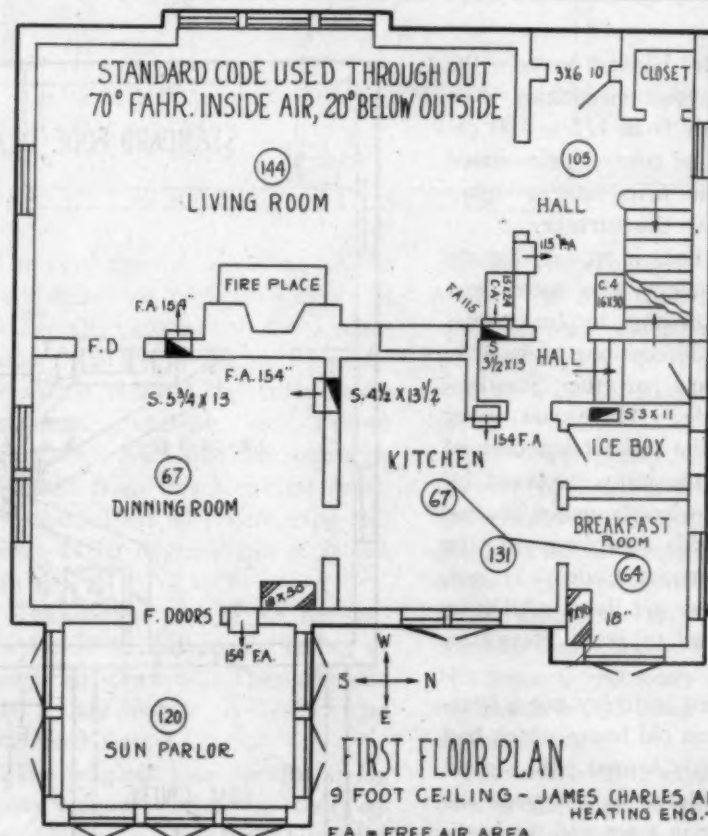
house asked the circuit rider to say grace. Here is what he said: "Rabbits hot, rabbits cold, rabbits

young, rabbits old, rabbits tender, rabbits tough. God all mighty knows in the last six weeks I have had rabbits enough. Please pass the potatoes." And so those of you who have had enough of by-guess warm air installations, try the Standard Furnace Code and instead of crying "enough," you will howl for more.

The original plan of the house called for a 24-inch furnace. The plan figured according to the Standard Furnace Code called for a 26-inch furnace, and the latter went in.

Hart & Crouse Company Holds Sales Conference in Chicago

The members of the Central Western district sales organization of the Hart & Crouse Company met on January 22nd at the Chicago office for a sales conference. The following attended: Cooper Pogue, Central Western District Manager; Geo. D. Coones, Chicago; W. A. Tilley, Chicago; R. C. Meleney, Chicago; C. R. Keeler, Chicago; C. Dozier, Cincinnati; Frank Prade,



FIRST FLOOR PLAN

9 FOOT CEILING - JAMES CHARLES ALLEN HEATING ENG. - ROCKFORD, ILL.

F.A. = FREE AIR AREA

S - STACK

O - FIGURES IN CIRCLE = "INCHES AIR REQUIRED

St. Louis; H. F. Haupt, Milwaukee; R. H. Geiger, Indianapolis; W. S. Appleby, Pittsburgh; Miss Supler, Chicago.

The following talks were given by members of the organization: "1926 Outlook and Sales Plan," by Cooper Pogue; "The Evolution of Warm Air Heating," by Geo. D. Coones; "Royal Boilers for Large

Buildings," by R. H. Geiger; "Selling the Royal Furnace in a Highly Competitive Market," by C. R. Keeler.

After these talks, the balance of the day was taken up with a discussion of the problems met by the men in the various territories. The meeting closed with a banquet at the Morrison Hotel.

J. M. & L. A. Osborn Company Holds Sales Convention

Election of Officers of Company Also Takes Place During Sales Convention

THE Harmony Club of The J. M. & L. A. Osborn Company, comprising the company officers, entire sales organization and department heads, held its fourteenth annual meeting on January 5, 6 and 7.

Mr. J. F. Reichert, its chairman, had a very well balanced and interesting program arranged and everyone left for their respective homes on Thursday night, feeling not only that the meeting had been a great success socially, but that a good many new ideas regarding the business had been gained. The out of town salesmen especially appreciated the opportunity of becoming still better acquainted with the organization, its business policies, etc.

The first meeting on Tuesday afternoon was addressed by Messrs. Bennett Chappel and D. M. Strickland, publicity director and head of the sales development department respectively of the American Rolling Mill Company. They outlined the "Ingot Iron Shop Plan" which was launched by these two gentlemen about a year ago. The results of the first year's work on this shop plan went beyond the American Rolling Mill Company's fondest expectations, and this, along with their national advertising and various other means of putting Armco Ingot Iron before the public, must surely benefit distributors and users of ingot iron material in increased business.

Wednesday morning the men had the privilege of listening to a lecture on steel by one of the most eminent metallurgists of today, Dr. T. H. Nelson, of Philadelphia, formerly of Sheffield, England, and now associated with the Ludlum Steel Company, manufacturers of Stainless Steel, of Watervliet, New York. Dr. Nelson was chief assistant to the noted metallurgist, Mr. Brearley of Sheffield, England, discoverer and patentee of Stainless Steel in 1916. After Dr. Nelson had given the entire history, its present uses and future possibilities of stainless steel, he invited questions on anything pertaining to steel which he was in a position to answer. His request was satisfied, since nearly everybody had something in mind which he cleared up for them very satisfactorily. Mr. T. B. Sherman, local representative of the Ludlum Steel Company, who was instrumental in getting Dr. Nelson to address the audience, and who introduced him, was commended for contributing so nobly to the success of the meeting, and it was the consensus of opinion that no steel man had ever addressed the gathering previously from whom it gained more knowledge than Dr. Nelson.

On Wednesday afternoon, during the course of the register discussion, Mr. J. H. Robinson of the Hart & Cooley Company, New Britain, Connecticut, manufactur-

ers of Hart & Cooley Registers, was present. He displayed and explained new models they were furnishing this year and gave the men valuable information which should help us in securing register business.

Dinner was served at 6:15 o'clock on Tuesday and Wednesday evenings for the club in the Masonic Auditorium located near the office, and evening sessions were resumed at the club room at 7:30. Considerable time at meetings this year was given to catalogue perusal and every item in the line was gone over carefully.

On Thursday evening a banquet was given in a private dining room at the Statler Hotel and present at this banquet was a former employee, Miss Sarah Dunn, a contralto singer of prominence, who has been studying music in New York City for the past three years. Miss Dunn, being home over the holidays, consented to sing on this occasion, and several selections were rendered very acceptably. Miss Dunn was accompanied at the piano by Miss Shart. At 7:45 p. m. the meetings officially came to a close, subject to call of the chairman, and all were guests of the company at the Hanna Theater that evening, which was then playing "The Student Prince."

The following officers were elected to serve through the coming year: J. F. Reichert, chairman; A. W. Howe, vice-chairman; W. B. Osborn, secretary, and M. J. Doering, treasurer.

It might be interesting to know that thirteen of the nineteen charter members are still active in this club, which was organized December 27, 1912. Each year has found an increase in line with the growth of our business, and there are now thirty-four members, all boosters of the "House of Osborn" and all spreading far and wide its gospel of "Quality and Service" for users of sheet metals.

Send us your unusual warm air furnace installation plans for reproduction.

Joe Harmon Makes Some Observations in Psychological Reaction

Joseph Harmon, 225 Central avenue, West Duluth, Minnesota, has made an observation in psychology which he wants to pass along to other readers. Here's what he has to say:

TO AMERICAN ARTISAN:

I am not an M. D. or a doctor of divinity, but years ago I installed a warm air furnace for a friend. My friend's wife wanted me to be sure and give them moist air, which I did and they were satisfied.

When this couple's daughter got married, I had to put a furnace in for her. It was a furnace that had no water pan for moist air. Whenever the mother went to her daughter's she could not stand the change. She could feel the difference right away, so I had to put in a water pan in their furnace; the mother was then more than pleased—the air was so much better.

Three years later, the son-in-law burned out the grates in the furnace, so I had to go and put in new ones. I took out the water pan. I thought it looked as if it never had had any water in it. I asked her son-in-law, who stood there, and he said "No, I have never put any water in it after you put it in and filled it up."

If the mother was satisfied, that was all he cared. He had no time to monkey with it.

Just enough moisture is all right, but you can get too much. Like all other things if a furnace is supplied with plenty of cold air, it does not require much water to evaporate. One trouble is there are too many installing furnaces who know nothing about it and the manufacturer knows less in most cases and makes it hard for the man with small capital and practical knowledge.

JOSEPH HARMON.

The following clipping was taken from the *Duluth Herald* Health Department, personally conducted by William Brady:

"Can you give me any information about heating of houses in the

winter, particularly about bringing moisture into the air when using a hot air furnace? (S. D. J.)

Answer—For maintaining a fair degree of humidity the warm air furnace is preferable to the hot air furnace. The warm air furnace recirculates a large volume of moderately heated air. The hot air furnace has the air intake from the outdoor air and circulates a comparatively small volume of superheated air. Heating the air reduces the humidity. The most important means of insuring a fair degree of humidity is the arbitrary fixing of the household temperature by accurate thermometers and not relying upon personal sensations to regulate the temperature. Set 68 as a maximum temperature. There is no good reason for exceeding that point. The air will retain a fair amount of its moisture if it is not heated above 68. Although only a few quarts of water will evaporate from the water pots in the furnace it is well to keep them filled. Any other open vessels of water on stove or radiator are a help. Many porous flower pots containing growing plants will evaporate considerable water in a room."

Feickelberg of Waterloo, Iowa, Evolves Method of Assisting Fire Prevention

Some time ago we published an article showing what the Grand Rapids warm air heating men are doing to prevent fires. The Grand Rapids men are not alone in this effort to reduce the fire hazard, as warm air heating men in other localities have also shown that they are doing all in their power to promote a good cause.

William Feickelberg, 521 Argyle Street, Waterloo, Iowa, proprietor of Feickelberg's Furnace Shop, is doing a little missionary work on his own account. In this work he has the endorsement of the mayor, the building inspector and the fire chief.

Mr. Feickelberg had printed a hand bill 8x9½ inches. In large type at the head of the bill are the

words, "Hints for Fire Prevention." Under this heading are the following "don'ts":

"Don't throw matches carelessly—lighted or not lighted.

"Don't throw away lighted cigar or cigarette stubs. Kill them.

"Don't throw ashes in paper or wooden boxes or against wooden partitions.

"Don't use circulation pipes for dust pans or paper baskets. Dust pans and waste paper baskets are cheaper than coal.

"Don't use top of furnace or smoke pipe for drying or storage.

"Don't leave furnace drafts open when not at home.

"Don't have any part of furnace casing touch furnace itself. Radiation, not circulation, is responsible for 90% of so-called 'over-heated furnaces.'

"Don't open cellar windows to cool cellar. The circulation of your furnace is wrong.

"Don't try to heat your house with a small amount of circulation. It is expensive in coal, repairs and fire."

Then follows the subhead, "Hints to Prevent Repair Bills."

"Grates are not guaranteed 24 hours after furnace man leaves. So keep ash pit free of ashes.

"Keep ashes away from sides of fire-pot. Use the poker and give shaker a rest.

"If your furnace is steel, replace broken brick or lining. Live coal will get the steel body 'if you don't watch out.'

"Keep smoke pipe in good repair and away from wood posts and partitions. A draft and falling spark will carry beyond 'I thought—'

"Never overheat a furnace. Take more time—avoid repairs and fire.

"Keep circulating pipes free from lint, dust and rubbish. Health is more precious than a few dollars for cleaning.

"Repairing broken parts is cheaper than health and decorations.

"Keep fire in fire-pot—not the dome—it was made for that."

At the bottom appears the name

and address of Mr. Feickelberg's shop.

With these bills Mr. Feickelberg made a house-to-house canvass, posting them in conspicuous places.

Rudy Out with Sales Literature on New Furnace for Larger Buildings

A furnace designed especially for churches, schools, garages, etc.

The Rudy folks have just brought out a new garage unit which can be used for churches, schools, picture houses and larger residences.

This unit is furnished complete as indicated in the cuts shown herewith. It can either be used with or without a fan.

In bringing it to the attention of the public their literature which is

"But to heat the space in a large building it is usually necessary to burn 10 to 15 pounds of coal per hour per square foot of grate surface and no domestic heater should be expected to withstand that strain.

"That's why we build this Giant heater. It is made especially to deliver just that type of service.

"Get the furnace that fits the job."

Their new "Giant" heater, known as No. 62, they say, weighs 2,280 pounds with a fire pot diameter of 29 inches and fire pot depth of 17 inches. The casing is 62 inches in diameter.

This large heater is being very well received by the trade that recognizes the limitations of domestic heaters for the larger job. Its rating without a fan is from 50

Langenberg Manufacturing Company Issue New Furnace Discount

The Langenberg Manufacturing Company, St. Louis, makers of the Front Rank steel furnace, has issued a new discount sheet. The sheet represents discounts on the company's Front Rank and Rainbow furnaces and also on pipe and fittings.

The letter calling attention to the discounts states that the company is eliminating sizes 421, 481 and 541. Orders received for these sizes will be filled with 451, 511 and 571, respectively.

Co-operative Foundry Company Out With New Red Cross Stove and Furnace Catalog

The Co-operative Foundry Company, Rochester, New York, makers of Red Cross gas ranges and Red Cross warm air furnaces, has issued its new catalog, No. 61. The book is in two sections. One section deals with warm air furnaces and the other with gas ranges. These books show all the latest developments in the Red Cross line of stoves and heaters and are an addition without which no progressive dealer's selling equipment is complete.

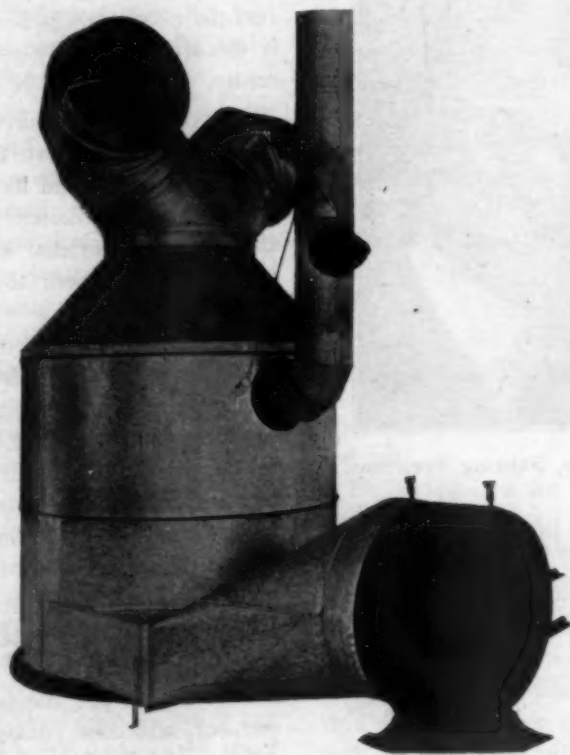
L. D. Berger Company Out with Catalog on Roof Gutter Supports.

L. D. Berger Company, 57 North Second Street, Philadelphia, Pennsylvania, has a gutter support which can be adjusted at every eighth of an inch.

The company catalog which illustrates this support is No. 27. It gives full details regarding the hanger—its construction and adaptability to various forms of roofs.

Free samples, too, are being given by the company. A request upon firm letterhead will bring both catalog and full information.

If you have an unusual sheet metal roofing job or a warm air heating problem that is troubling you, send it to us for solution.



Showing the New Heater.

especially prepared for this unit explains:

"The domestic or house heating furnace is usually rated on a basis of a consumption of four pounds of coal per hour per square foot of grate surface and the parts are designed to withstand that amount of heat.

to 75,000 cubic feet capacity, or 1,200 square inches warm air pipe area. When the fan is attached it is designed to heat a building up to 150,000 cubic feet capacity. Numerous installations have proved the ability of the furnace to handle the heating of a building of those dimensions.

Indiana Retail Hardware Men Find 1926 Business Prospects Bright

All Angles of Retail Hardware Store Discussed by Prominent Men

INCREASED retail hardware sales last year, over 1924, and the prospect of this year eclipsing the 1925 figure was reported by H. E. McGee of Winchester, President of the Indiana Retail Hardware Association, in his annual report at the twenty-seventh convention of the association at the Claypool hotel Tuesday, January 26.

"General improvement in business is expressed by both the retail hardware dealers and the manufacturers, and 1926 starts as a banner year," the president added. "Our exhibit at Cadle Tabernacle is the largest in the history of the association, and its 150 exhibitors reflect the improved business condition."

**Report of Secretary-Treasurer
G. F. Sheely, 1926.**

Once more as fellow retail hardware merchants, and men whose interests are common, you come together from the four corners of this Hoosier state to become better acquainted and discuss during the four days of this convention your common problems.

To you they are problems of much concern, because they affect the very vitals of your business. Some of them may appear unsolvable, but certainly in a great conference such as this you can at least reach some conclusions that will be helpful and beneficial, and which you can apply to your individual businesses with some profit.

During the life of the retail hardware associations there have been many changes in your particular merchandising field, as in others, and we predict that during the next decade we will witness even greater changes.

If the association can claim any credit for helping you to solve them, and we believe you will give us the right to that claim, then how much

more important it is that you continue to give unreservedly your support and encouragement to your organization in order that it may assist you in meeting and solving those problems which are now appearing on the business horizon, and which we believe will be even more difficult of solution than those in the past.

Credits and Collections

The extension of credits is one which largely lies within the power of the individual merchant, to reg-



H. E. McGee, Retiring President.

ulate, and is a problem that he himself can solve.

Collections are more of an economic problem, as it is difficult to make collections during a period when the farmer's financial condition is such as will not enable him to meet his obligations.

We must admit and will recognize the fact, however, that the more careful we are in our extension of credit, the less trouble we will encounter in our collections.

My observations are that one of the great weaknesses of the average merchant is his failure to follow up on his collections. Many overlook the fact that the best time to

press collections is when business is good.

The establishment of definite credit terms in your business and living up to them religiously is a partial solution to your credit problem, but no method or system you may adopt will work automatically.

Advertising

Many members admit that their advertising is one of their greatest weaknesses. Some advertise spasmodically, many without a system or plan.

Your association can be of invaluable service to those of you who feel the need of help along this line if you would but give us the opportunity.

As you know, we have an advertising service that can furnish you every assistance, and by the use of it you can do consistent advertising and of a character that will really be of value and benefit to your business.

Last June there was mailed from our office to every member a ninety-six page book, containing letters covering all the leading lines found in the hardware store. To those who use sales letters as one form of advertising you should find this book of immeasurable value.

Our national association has in preparation a similar book on advertising which, when completed, should be in the hands of every member, and used consistently as a guide and help in planning his advertising.

In preparing these different services for the benefit of our members your association can be likened to the doctor. We can prescribe and prepare the medicine, but it is up to you to apply.

The salesmanship series, one of which was enclosed with each issue of Indiana Hardware Monthly for

the past two years, the last of which was enclosed with the November issue, will be of real value only to those who studied them and passed them on to their sales force.

This series will soon be available in bound form at a price not to exceed \$1.00 to those who desire it.

Hardware Survey

Each of you have already received direct from our National office report blanks with the request that you fill in your sales and cost records for 1925, and return promptly.

These figures are to be used in compiling records for the 1925 Hardware Survey.

I consider this as one of the most valuable and outstanding services performed by your association for the membership. It enables you to place your finger upon any single or individual item of expense in your store that is out of line with the average, provided you have the records in your own business to make the comparisons.

Out of the total number of returns received from Indiana last year, 28% were unusable on account of insufficient figures, which would indicate that there is an opportunity for improvement in hardware accounting records.

Let us double the number of Indiana reports for the 1925 survey, which will be more in keeping with the number used from other states of equal membership.

As is very well known, the retail hardware business for the past few years has not shown the margin of profit on sales to which it is entitled. What the figures for 1925 will show will be revealed in the Survey when completed.

We have been able to point out some of the weak spots in the retail hardware business as a result of this annual survey. And as an individual retailer it should be of great value and benefit, and is worthy of your support.

There is not a single question on the form which you should not be able to answer from your own records, so I ask that each of you give us your support in this work by submitting the necessary figures.

The available records on 1925 sales show hardware retailers have not kept pace with other lines of merchandising.

The two leading catalog houses had a 1925 volume 74% in excess of their 1921 volume, the four leading chains an increase of 71%, and department store sales 20% greater. While the typical retail hardware store shows an increase of 6% for the same period.

These figures may not be surprising to those of you who have been studying the trend of the hardware business during the past few years, nevertheless it is a matter which should have our serious and thoughtful study.

We recognize that the catalog houses, chain, department and other large buying units have a tremendous advantage in their buying power over the independent retailer.

It is possible that a solution to the buying problem of the independent retail hardware merchant may be found in group buying.

If the majority of hardware retailers were making money, the question of volume might not be so important, but as it is we have two problems to impel our interest and action.

Deaths

The reaper of death has visited us and taken about its usual toll from among our members during the year.

Following is a list of those who have passed from our midst, according to the records we have, which may not be entirely complete.

Among the number are some of our oldest and most faithful members, whose memory shall remain with us always.

J. C. Shanklin, Frankfort.
E. M. Bush, Evansville.
G. F. Gengnagel, Butler.
Mr. Lodge, Lodge Hardware, Madison.
Chas. Franzman, Chrisney.
John W. McKinney, Kirklin.
John Cook, Sr., Greencastle.
James W. Lilly, Indianapolis.
M. W. Coates, Kokomo Hardware, Kokomo.
Fred P. Straub, Evansville.

Geo. W. McCord, Oakland City.
Wm. Aspy, Muncie.
Lewis Bridge, Huntington.

Hardware Exposition

We are pleased to report a substantial growth in the number of firms represented in the Exposition this year over any previous year.

While, of course, the majority are firms who exhibit year after year, yet many are with us for the first time.

The Exposition is considered as much of an educational feature of our convention as the sessions. There you see the very latest in your line on display and have shown and demonstrated to you by experts the merchandise which you in turn show and demonstrate to your trade.

We hope each of you will find it possible and to your advantage to place many orders with the exhibitors this year. It will show you appreciate that their presence contributes to the success of the Convention, and at the same time you may win for yourself one of the prizes we are offering this year.

Association Activities

It would take entirely too long to give you a detailed report of some of the service work your association has done during the past year.

If you are a reader, and we hope you are, of Indiana Hardware Monthly, you have noted reports of some of the activities.

Group meetings continue to be one of the outstanding features, and we hope during the coming year to make them even more profitable. Their success, however, depends entirely upon the support you give them.

With your help and the co-operation of other retail interests, we succeeded, after many years of effort, in having a Garnishee Law placed on the Statutes at the last session of the legislature. We hope it is a law you may not be forced to exercise to any great extent, but it is now available for your protection when occasion requires.

Research Service

In each issue of Hardware Monthly we give you outline of the hardware and general business con-

ditions, as they apply to Indiana. This information is furnished us by Mr. Stokes, head of the Research Division of the National Retail Hardware Association, who also gives you in each issue of Hardware Retailer a study of the current and immediate future outlook.

We cannot help but feel this service is very valuable, especially to those of you who study and make use of the information, and we expect to continue this feature.

Warnings

During the year we have issued a number of warnings to our members, through Hardware Monthly, by special letters and postals, on check forgers, fake schemes and selling plans designed primarily to beat you.

In spite of these constant warnings, we frequently learn of some member who has been stung. One who has signed on the dotted line before making an investigation.

Your association endeavors to be a clearing house on information of this character, and if you will give us the opportunity I am satisfied we can save Indiana hardware merchants hundreds of dollars annually from schemes of doubtful character.

Make this your slogan—"Investigate first; invest afterward."

Membership

In spite of the many changes which have occurred in the retail hardware business in Indiana the past year, we have been able to maintain our membership, showing a total on January 1st of 1,058.

We hope the time is not far distant when we will be able to convince the few who are not members that they can no longer afford to remain on the outside.

Your officers and board of governors are men who have given a lot of time and thought to the association work. They have assumed the obligation their respective offices imposed upon them, with dignity, and performed their work with credit to your association. To be elected to an office of this organization is no longer an honor, but an

obligation, which carries with it responsibility.

I want each of you to know that your officers appreciate the assistance you have given us, in group meetings, and other association work. With us it is a source of great satisfaction to know we can depend upon you for this co-operation, and with you I hope it has been and will always continue to be a helpful and profitable participation.

Thomas F. L. Henderson of Chicago, business counsel of the LaSalle Extension University, in a talk declared that at no time in the world's history were opportunities so great as existed at this time. "Personal Inventory" was the title of Dr. Henderson's talk.

"Quite a large proportion of failures in life is directly traced to the absence of vision. It is the prerogative of every young man to have a vision, and of every older man to have had a dream. But in the absence of an objective, with nothing seemingly to head for, this more than anything else makes possible a degree of waste motion, which will almost wipe out the pos-

sibility of attaining the highest success," Dr. Henderson said.

"The Retail Hardware Store" was the subject of an address given during the morning session of Wednesday. The subject was divided into three sections. The first, "Guiding the Business with Accurate Records," was ably handled by Paul Mulliken, Elgin, Illinois. "A Study of the Operating Expense Statement" was taken up by C. W. Helgeson, Indianapolis.

Second, "The Right Pricing of Merchandise," was handled by E. B. Gallaher, Norwalk, Connecticut.

Thursday the discussion of the retail hardware store was continued.

Officers to Be Advanced

Since it is the custom of the association to advance the officers each year, with the exception of the secretary-treasurer, Lloyd W. Slater, of Argos, Indiana, will head the organization in 1926. Mr. McGee, the retiring president, will become a member of the executive committee, and S. G. Bartel, of Evansville, will be named vice-president. G. F. Sheely of Indianapolis is the secretary-treasurer.

What Representative of American Artisan Saw and Heard at Indianapolis This Week

Warm Air Furnace Manufacturers' Representatives Busy With Order Books

By MISS ETTA COHN

WITH every available inch of space taken by manufacturers and jobbers of hardware of all kinds, warm air furnaces, stoves, cabinet heaters, sheet metal products, warm air heating accessories and kindred products, the Cadle Auditorium, Indianapolis, presented a beautiful picture when it threw its doors open to the trade Tuesday afternoon, January 26th.

Bright lights, bright colors and displays that were marvels of art and made you wonder how they could do it all in one day, greeted you. Tuesday afternoon was more

of a social event than business, as most of the exhibitors spent their time renewing acquaintances with their fellow exhibitors and salesmen and shaking hands with dealers; but Wednesday, Thursday and Friday, order books and pencils were used aplenty, as this was a real buying convention.

The Van Camp Hardware Company, celebrating their golden anniversary of successful prosperity, furnished the music. During the exhibition the musicians and entertainers occupied the large stage which was beautifully draped in

shimmering gold with a shield reading—Van Camp's 1876-1926—to remind the folks that this is a jubilee year for the company.

The music was "great" and many a private exhibition and lesson was given of the Charleston in many booths and in many aisles by both salesmen and dealers.

Yes, "Doc" Hynds and R. T. Wasson, with their two representatives, John T. Lennon and H. O. McElwain, were among those present. As usual, they had a real display of Lennox Torrid Zone furnaces and judging from the number of dealers continually in their booth business must have been good. As one of the neighboring exhibitors said to me: "Did you ever see such a cheerful smiling bunch of men as those Lennox fellows?"

Another of the large attractive displays was that of the Fox Furnace Company, featuring its full line of warm air furnaces and cabinet heaters. E. H. Skinner, in charge, when asked the usual question, "How's business?" answered, "Fine, plenty of good buyers here," and K. L. Clevenger, his assistant, agreed with him.

The Gilt Edge boys are surely proud of their progressive organization, and, displayed in their inviting-looking booth, in addition to several furnaces, were reproductions of that attractive 4-page insert R. J. Schwab and Sons used in AMERICAN ARTISAN 1925 Warm Air Furnace Special, to announce the company's 50th anniversary, entitled "Pride of Achievement." Henry "E." couldn't have picked better men than "Pom" (Pomrenning) and Travers Daniel, Jr., to represent him. "Pom," as usual, was full of news—real news such as "Why! didn't you know our Miss Gronzo married Art Podolske, the popular Milwaukee Sheet Metal secretary. I introduced them several years ago, and, say, Paul L. Biersach sure was honored by the Builders' and Traders' Exchange of Milwaukee. They elected him president—what do you know

about that!—etc., etc."

T. Reid Mackin, the "peppy" International Heater Company representative, second only in good looks to their assistant Chicago manager, Les Taylor, just had to stop at Indianapolis this week to say "Hello" to his dealer friends and the Auxiliary boys.

It is good to see the way our Southern friends are invading the North. B. E. Woodward, who says he is the nephew of the popular B. E. McCarthy, president of the Phillips and Buttorff Manufacturing Company, of Nashville, made his debut with an attractive exhibit of Royal Enterprise ranges and Enterprise Automatics (cabinet heaters).

Other "Dixie" exhibits were the Allen Manufacturing Company, of Nashville, and the Birmingham Stove and Range Company, of Birmingham, Alabama.

The Hero Furnace Company had the same old stand and apparently the same old popularity with the Indiana dealers if one can judge by appearances. Its representatives, J. F. Boyle (self-dubbed the handsomest Irishman in the furnace game) and Lyle Simpkins, were mighty busy men throughout the week.

"No, I don't think Charlie Glessner or Joe Goldberg can get away to help me this week, but John Brooks will be here Wednesday, so I ought to be satisfied," is what Creston Barnes, of the Excelsior Steel Furnace Company, told me when I finally managed to get a word in edgewise. "Business is fine and if 1926 keeps up the way it started, it will be a wonder. Our company certainly has no complaint to make."

Always smiling, always enthusiastic, Harry R. Jones, presiding in the Milcor exhibit, says, though he has been with the Milwaukee Corrugating Company only a comparatively short time, he has long since learned that they are the best people on earth to work for and work with. Milcor quality and Milcor service, he says, is the real thing.

"Billy" Waller, Chicago manager, and Fred Foster, manager of the furnace fittings department, spent Wednesday and Thursday with Mr. Jones. And, last but not least, there were Mrs. Foster and Mrs. Jones to add attraction.

When Harry Beaman can snatch a moment away from the all important Hall-Neal furnaces, he is busy watching to see that no one tries to put anything over in the Indiana legislature that might be harmful to the warm air heating industry. With every order and every inquiry "Harry" hands out the friendly invitation and reminder that the Indiana Sheet Metal and Warm Air Heating conventions in Indianapolis during the week of February 18th are going to be wonderful—worth traveling hundreds of miles to attend. The big bosses, Charlie Hall and Harry Neal, encourage Harry Beaman to do everything in his power to advance the interests of warm air heating. J. E. Airhart, another Hall-Neal representative, is also an enthusiastic auxiliary worker.

One of the old stand-bys at the Indiana hardware show is our good friend, the Wheeling Corrugating Company. When asked what in particular his company was exhibiting this time, R. N. Jacob, in charge, answered "Same as usual, everything good under the sun in sheet metal products." Assisting Mr. Jacob were E. N. Thomas, A. C. Barackman and A. B. Norris.

At the U. S. Register Company exhibit, I ran across our old popular ex-"Iowan," R. Hogoboom, who admitted that while he thoroughly enjoyed traveling in this part of the country, he just couldn't help having a soft spot in his heart for his old Iowa gang.

J. C. Henley and Frank E. Beeth, who did the honors for Tanner and Company, jobbers of sheet metal and furnace supplies, apparently have a host of friends among the Indiana hardware men and these friends gave them plenty of opportunity to use their order books.

Bill Laffin, the "Bee" of "Tee-

Bee" (Trow Warner, is you know, the "Tee") is a busy man these days but never too busy to shake hands with his many friends, even though they may not be register buyers.

He and Martin T. Cornell were comfortably housed in a conveniently located booth where the complete line of Tuttle & Bailey registers, grilles and faces showed up so attractively many dealers just couldn't resist placing their orders. Oh, yes, by the way, Bill says "Bill Junior" is some boy and you ought to see him smile." Cheer up Bill, maybe he's Laffin, not smiling at his dad.

Gohmann Brothers and Kahler are displaying a very attractive range these days and C. J. Harman says like all other of Charlie Gohman's products, it is going over big with the trade.

And guess who "blew in" Wednesday evening from Louisville? Our old friend, Gus Ruhling (representing Vaughan and Bushnell, Matthias Klein, etc.) who said he just couldn't resist spending at least one day with the Indiana bunch. Gus says he is genuinely sorry he couldn't exhibit in Indiana this year but hopes to next time.

H. W. Beegle is the same Beegle—same glad hand and cheery greeting for everybody. No wonder he is so popular with the trade.

The exhibit of the Globe Stove and Range Company drew many visitors. Although the entire line—furnaces, cabinet heaters, parlor stoves and ranges—was exhibited, what drew most attention was the new pearl grey enameled "Titan" kitchen range. It is a beauty and one can easily understand why Sales Manager William Cooper says it is creating such a sensation with the trade. It sells itself. The Globe Stove and Range Company was well represented, the following being on the job: William A. Cooper, A. E. Murray, W. S. Toomey, George W. Beale, Charles Curlee, Mark A. Brown and Frank W. Thompson.

Eddie Law and O. A. Hoffman were busy men answering questions, writing orders for the Mueller

Furnacette, furnaces, registers and the new fitting which they say is positively a wonder. The only souvenir they distributed was one that will always be valuable, for as the boys ably put it, "Our remembrance to the trade is that of a good product which gives good service and produces real satisfaction—it seems that all furnace salesmen are enthusiastic about their firms, the products they sell and the fine fellows they call on and the Mueller representatives are no exception to the rule.

Among the old standbys at the hardware conventions is the American Steel and Wire Company, and they, as usual, had one of the most attractive and inviting booths of all.

Richards-Wilcox Manufacturing Company, as to be expected, were also present with a fine corps of wide-awake salesmen.

Albert Lea Foundry Company, Anchor Stove and Range Company, Beckwith Company, Charter Oak Stove and Range Company, Copper Clad Malleable Iron Range Company, Crescent Stove Company, Estate Stove Company, Home Stove Company, Malleable Iron Range Company, Majestic Manufacturing Company, New Process Stove Company, Perfection Stove Company, Quick Meal Stove Company, all attractively displayed their wares before His Majesty—the Indiana Retail Hardware Dealer.

Is the Mail Order House Doomed to Pass Out of Existence?

This question is a bit startling.

Every once in a while somebody asks a startling question like that: "Is the department store doomed?" "Is marriage doomed?" Is this, that or the other thing doomed?

Mostly the answer is a laugh. Mostly the laugh is justified. The picture of some great institution or economic organization suddenly collapsing, which is the mental picture called up by such a question, is so improbable that it excites the risibilities.

Yet there are many things around us today that really are doomed,

that really will fade out of the picture, though they may not fade instantaneously. And seriously, it is by no means an improbability that the mail-order house as it stands today will pass the way of many other types of institutions now obsolete. But that is a very different thing from saying that the big mercantile corporations that own them will cease to exist.

So the question, "Is the mail-order house doomed?" isn't such a startling, laughable one after all.

Why is Sears, Roebuck & Co. giving so much attention today to the launching of retail stores, veritable department stores, where merchandise of quality as well as merchandise of price is sold across the counter? Why is Montgomery Ward & Co. giving so much attention to retail trade? Is it possible that the managements of these big concerns are looking several years into the future, to a time when better transportation, better delivery facilities, and more efficiently specialized retail methods will make it possible for the rural customer to get almost as close to the store as the urban shopper?

For several years the movement has been right in this direction. The little country store is no longer a joke. Today it is no longer little. It is doing business over a tremendously widened circle, and with a specialized efficiency that vies with the systems of the big city stores.

State roads and better and cheaper automobiles have been responsible. Road and automobile development will scarcely cease.

And how about the airplane? A matter of the tomorrow, of course; but who dare say how far away that tomorrow is?

Go back twenty years. Think of the automobile, and the changes it has not yet wrought. There's food for thought in it.

Impossible to Know Facts of Humans.

No one can pass final judgment upon his fellow man without involving himself in error. The reason is plain. It is impossible to

know all the facts about any human being. Such complete knowledge would require a study of every brain cell and nerve—of every item in the complex environment, training, education and heritage of the man. The wise thing to do, therefore, is to seek out the good qualities of our friends and neighbors. Always these qualities can be intensified by matching them with the good within ourselves. Thus kindliness will thrive and meanness and selfishness be lessened in degree and influence.



Wisconsin Sheet Metal Contractors Association, Gold Room, Wisconsin Hotel, Milwaukee, February 2 and 3, 1926. R. E. Kelm, secretary, 367 Third Street, Milwaukee.

Nebraska Retail Hardware Association, Omaha, February 2 to 5, 1926. George H. Dietz, Secretary, Little Building, Lincoln.

Wisconsin Retail Hardware Association, Milwaukee, February 2 to 5, 1926. P. J. Jacobs, Secretary-Treasurer, Stevens Point, Wisconsin.

Michigan Retail Hardware Association, Grand Rapids, February 9 to 12, 1926. A. J. Scott, Secretary, Marine City.

New York State Retail Hardware Association, Rochester, February 9 to 12, 1926. John B. Foley, Secretary, 4-12-13 City Bank Building, Syracuse.

Iowa Retail Hardware Association, Des Moines, February 9, 10, 11 and 12, 1926. A. R. Sale, Secretary, Mason City.

North Dakota Retail Hardware Association Convention and Exhibition, Fargo, February 10, 11 and 12, 1926. C. N. Barnes, Secretary, Grand Forks.

Pennsylvania and Atlantic Seaboard Hardware Association convention and exhibition, Commercial Museum, Philadelphia, February 15-19, 1926. Sharon E. Jones, Secretary, 604 Wesley Building, Philadelphia.

Indiana Sheet Metal Contractors' Association, Hotel Severin, Indianapolis, February 16, 17 and 18, 1926. Leslie W. Beach, Secretary, Richmond, Indiana.

Indiana Fur-Mets, Hotel Severin, Indianapolis, February 16, 17 and 18, 1926. O. Voorhees, 36 West Tenth Street, Indianapolis.

Indiana Warm Air Heating and Ventilating Association, Hotel Severin, Indianapolis, February 16, 17 and 18, 1926. Frank E. Anderson, Secretary, Terre Haute.

Connecticut Retail Hardware Association, Hotel Bond, Hartford, February 18 and 19, 1926. Henry S. Hitchcock, Secretary, Woodbury.

Montana Implement and Hardware Association, Great Falls, February 18, 19 and 20, 1926. A. C. Talmage, Secretary-Treasurer, Bozeman.

Illinois Retail Hardware Association, Sherman House, Chicago, February 16 to 18, 1926. Leon D. Nish, Secretary, Elgin.

Ohio Hardware Association, Cleveland, February 16 to 19, 1926. James B. Car-

son, Secretary, 1001 Schwind Building, Dayton.

Minnesota Retail Hardware Association, St. Paul, February 16 to 19, 1926. C. H. Casey, Secretary, Nicollet and 24th Streets, Minneapolis.

New England Retail Hardware Association, Boston, Massachusetts, February 22 to 24, 1926. George A. Fiel, Secretary, 80 Federal Street, Boston, Massachusetts.

South Dakota Retail Hardware Association, Sioux Falls, February 23 to 25, 1926. C. H. Casey, Secretary, Nicollet and 24th Streets, Minneapolis, Minnesota.

Virginia Retail Hardware Convention and Exhibition, Jefferson Hotel, Richmond, February 23, 24 and 25, 1926. Thomas B. Howell, Secretary, 301 East Grace, Room 906, Richmond.

Ohio Sheet Metal Contractors' Association, Toledo, Ohio, February 24, 25 and 26, 1926. George F. Mooney, State Secretary, New First National Bank Building, Columbus, Ohio. F. C. Dunn, Local Secretary, care Builders' Exchange, Toledo.

The Michigan Sheet Metal and Roofing Contractors' Association, Post Tavern Headquarters, Battle Creek, March 1, 2, 3 and 4, 1925. Frank E. Ederle, Secretary, 1121 Franklin Street, S. E., Grand Rapids.

California Retail Hardware and Implement Association, Hotel Whitcomb, San Francisco, March 16, 17 and 18, 1926. Le Roy Smith, Secretary, 112 Market Street, San Francisco.

New York State Sheet Metal Contractors Association, Elmira, New York, April 14 and 15, 1926. John J. Yager, Secretary, 817 Sycamore Street, Buffalo.

Pennsylvania Sheet Metal Contractors' Association, Hotel Lycoming, Williamsport, April 14, 15 and 16, 1926. W. F. Angermeyer, Secretary, 7253-55 Franks-town Avenue, Pittsburgh.

Southeastern Retail Hardware and Implement Association, (composed of Alabama, Florida, Georgia and Tennessee) Convention and Exhibition, Atlanta, Georgia, May 10, 11 and 12, 1926. Walter Harlan, Secretary, 701 Grand Theatre Building, Atlanta.

Arkansas Retail Hardware Association, Little Rock, Arkansas, May, 1926. L. P. Biggs, Secretary, 815 Southern Trust Building, Little Rock.

National Association of Sheet Metal Contractors, Louisville, Kentucky, May 24 to 28, 1926. Edwin L. Seabrook, Secretary, 608 East Chestnut Street, Philadelphia, Pennsylvania.

Carolinas Hardware Association, Raleigh, North Carolina, June 8 to 10, 1926. A. R. Craig, Secretary, 717-18 Commercial Bank Building, Charlotte, North Carolina.

Mississippi Retail Hardware and Implement Association, Biloxi, June 21, 22 and 23, 1926. Guy Nason, Secretary, Starkville.

Retail Hardware Doings

Illinois

Jacob Graff has purchased the interest of his partner, John Rankin, in the Manito Hardware Company at Manito.

D. A. Campbell Hardware Store at Monmouth has been sold to D. E. Yowell of Monroe City, Missouri.

Iowa

Walnut Hardware Company of Walnut has been sold to Hoffman and Son.

Kentucky

A new hardware firm, Walker-Megown Company, will soon be opened for business at 612 East Third Street, Lexington.

Michigan

E. C. Lee Hardware Store at Bailey has been damaged by an explosion.

Clarence Porritt has purchased the hardware store of Luchtman and Payne at Davis.

Minnesota

W. J. Blaha and C. H. Robinson have opened a hardware store at Staples.

Russell Turton has purchased a hardware business at Stockton.

The Seitzer and Johnson Company have taken over the hardware stock, machinery and good will of the Olson and Seitzer Company at St. Peters.

Missouri

The W. F. Hain hardware store at 2642 Prospect Avenue, Kansas City, has been damaged by fire.

Montana

The Cartee Hardware Company at 915 Front Street, Butte, has been damaged by fire. The loss is estimated at \$11,000.

Nebraska

The Fred A. Bates Hardware Store at Broken Bow has taken over the stock and fixtures of the Co-operative Company at the same place.

Frank Schnase has sold his hardware business at Walthill to Racely and Rumsey.

North Dakota

The Kludut and Meyer hardware store at Linton has been damaged by fire.

Ohio

F. M. Barber has sold his hardware business at Rudolph to O. A. Barker.

Oregon

Ames Hardware Company of Silverton has purchased the Sapper hardware business at the same place.

Washington

W. R. Hamilton has sold his hardware business at Ferndale to John Bollman.

Big Bend Hardware Company at Odesa has been incorporated with a capital of \$15,000. Incorporators are Z. V. Leslie and W. L. Michaelson.

F. L. Haines has sold his hardware store at Indiana and Division Streets, Spokane, to C. J. Hoescher.

Wisconsin

Morley-Murphy Hardware Company of Green Bay will open a branch at 454 Milwaukee Street, Milwaukee.

You can catch more flies with honey than with vinegar, according to the old proverb. More good can be accomplished by judicious praise than by nagging. Here are some lines worth repeating—not for their value as verse but for their good-natured precepts:

Don't Believe in Knocking

I don't believe in knockin',
For a knock's a sort o' boost
That makes your luck go floppin'
To another fellow's roost.
I don't believe in "roastin'"
Any thing or any one;
It only ends in toastin'
Things 'till they are overdone.

Heavy Steel Shipments Keep Up—New Business Developing More Slowly

Pig Iron Prices Firm—Lack of Demand Felt in Non-Ferrous Metals

SHIPMENTS of iron and steel are keeping up at a high rate and this represents the strong foundation of the market. New business, however, is developing more slowly than was the case a few weeks back, signifying both the well-covered position of buyers and their complacency in discounting future needs, which present prospects indicate will be heavy. The general conviction that higher prices are not probable soon is an important factor and developments this week appear to have made early advances even more remote, leaving the market still largely in the hands of the buyers.

Because of the more irregular flow of incoming tonnage, some producers are disposed to be more aggressive in seeking business and competition has been sharpened. Pittsburgh and eastern makers have invaded the Chicago market quoting on a parity with the local mills and in plates in Milwaukee have gone slightly lower with a 1.80 cents Pittsburgh price. This has checked the recent talk of price advances at Chicago. Black sheets are uncertain and blue annealed reflect the pressure from the plate mills.

Pig Iron

At Pittsburgh the pig iron market is proceeding along the same lines followed for several weeks.

The outstanding sale, No. 3, or gray forge iron, last Saturday involved 1,000 tons at \$20, valley. The buyer is located in central Pennsylvania.

This demonstrates again that \$20.50 is the firm minimum for No. 2 plain.

All the iron made is going out. New demand for steelmaking iron is particularly dull.

Bessemer sales in single carloads are noted at \$21, valley.

At Chicago buying of northern pig iron in the past ten days has been picking up.

A number of sales of 150 to 200 tons are reported, with the Milwaukee district more active than the Chicago or western Michigan automobile territory.

Malleable and No. 2 foundry are unchanged at \$23, Chicago furnace. The market on low phosphorus iron is being shaded and it is said that about \$31, delivered Chicago, can be done.

Quotations are firm at \$22 to \$23, base. Shipments are about equal to production.

Copper

Some domestic buying has been done in the past week, mostly on the basis of 14.00 cents delivered Connecticut for electrolytic and 14.12½ cents delivered midwest.

However, some business was done ¼ cent higher and at one time the refinery price crossed 14.00 cents.

Some users, however, were unwilling to follow the market up and others were not very strong for buying just now at any figure, so the market settled back to quietness.

At 14.00 cents producers show much resistance to easiness.

Tin

While the New York tin market has a little better undertone today, it is distinctly dull with traders showing no interest to stimulate business.

The largest holders of Straits tin consider that the price now prevailing for prompt deliveries is too low and do not care to compete at this level. At the same time, it has been demonstrated that the small quantity of prompt Straits that was offered at 61.50 cents was difficult to sell, and at today's call on the Metal Exchange 25 tons were sold at 61.40 cents.

March is offered at 61.25 cents, April and May at 61.00 cents with bids at ⅛ cent to ¼ cent less.

Zinc

Prime Western zinc is now about 85 cents per 100 pounds below the high point of November and 65 cents per 100 pounds below what it was January 1st.

The view is reasonably expressed that the decline has fully discounted if not overdiscounted any change in conditions.

The change indeed is more in regard to prospects than immediate volume of operations. The latter are good and unfilled orders large.

New business in sheets is reported slow in coming along, however. To some extent this is simply caution—manufacturers always find that buyers of their products watch the raw material markets and defer purchasing when they are declining.

Lead

The heavy metal is easy, after having been one of the steadiest of the group for a long time. Use continues large and shipments good, but output increased last month.

Old Metals

Wholesale quotations in the Chicago district, which should be considered as nominal, are as follows: Old steel axles, \$17.00 to \$17.50; old iron axles, \$25.50 to \$26.00; steel springs, \$18.50 to \$19.00; No. 1 wrought iron, \$13.75 to \$14.25; No. 1 cast, \$16.00 to \$16.50, all per net tons. Prices for non-ferrous metals are quoted as follows, per pound: Light copper, 9 cents; zinc, 5 cents, and cast aluminum, 20 cents.

Solder

Chicago warehouse prices on solder are as follows: Warranted 50-50, \$39.25; commercial 45-55, \$36.75, and plumbers', \$34.25, all per 100 pounds.



They're watching costs in the Navy— so they "shear with the Unishear"

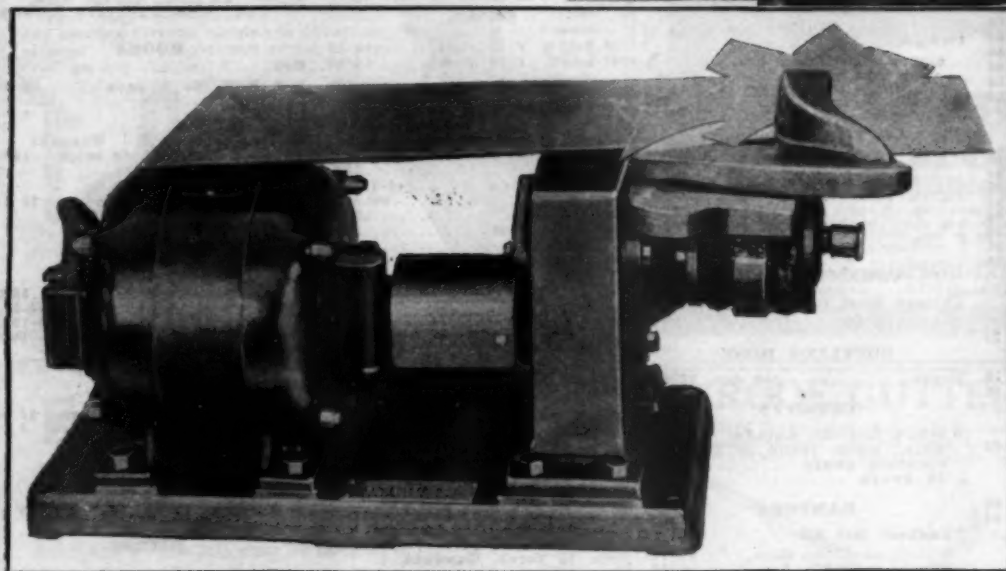
The U. S. Marine Corps says of Unishear, *"saves time, is more accurate, and far superior in every way."*

Manufacturing economy, too, demands this performance. Many shops are getting surprisingly low cost results with the UNISHEAR. This machine, portable and compact, cuts any flat stock quicker, better, cheaper—without burr, without distortion of material. Follows any line exactly, stops accurately at any point. Needs but one operator even on largest work, straight or irregular.

Operates from lamp socket or power circuit (G. E. Motor; any voltage or cycle available). Capacity 14 U. S. gage. Speed, 15 feet per minute.



Photo taken in the shops of the U. S. Marine Corps, Philadelphia, Pa.



We are prepared to demonstrate this machine on your work.
Write us. Dealers and salesmen wanted in
unassigned territory

The Unishear Co., Inc., 170 Fifth Ave., New York, N. Y.

Chicago Warehouse Metal and Furnace Supply Prices

AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing Western Hardware and Metal prices corrected weekly.

METALS

PIG IRON

Chicago Foundry	\$23 00
Southern Fdy., No. 2 27 91	28 00
Lake Superior Charcoal.....	28 00
Malleable	28 00

FIRST QUALITY BRIGHT TIN PLATES

IC 20x28 112 sheets.....	\$37 00
IX 20x28	38 00
IXX 20x28 60 sheets.....	18 30
IXXX 20x28	17 30
IXXXX 20x28	18 40

TERNE PLATES

	Per Box
IC 20x28, 40-lb. 112 sheets	\$25 10
IX 20x28, 40-lb. " "	28 00
IC 20x28, 30-lb. " "	21 30
IX 20x28, 30-lb. " "	24 30
IC 20x28, 25-lb. " "	30 30
IX 20x28, 25-lb. " "	33 30
IC 20x28, 20-lb. " "	17 30
IX 20x28, 20-lb. " "	20 30
IC 20x28, 15-lb. " "	16 55
IX 20x28, 15-lb. " "	19 55
IC 20x28, 8-lb. " "	12 55

"ARMCO" INGOT IRON PLATES

No. 8 ga. up to and including	
1/4 in.—100 lbs.....	4 55

COKE PLATES

Cokes, 80 lbs., base, 20x28.....	\$12 70
Cokes, 90 lbs., base, 20x28.....	12 35
Cokes, 100 lbs., base, 20x28.....	12 35
Cokes, 107 lbs., base, IC 20x28.....	13 40
Cokes, 135 lbs., base, IX 20x28.....	15 40
Cokes, 155 lbs., base, 55 sheets.....	8 30
Cokes, 175 lbs., base, 55 sheets.....	9 70
Cokes, 195 lbs., base, 55 sheets.....	10 45

BLUE ANNEALED SHEETS

Base 10 ga.....per 100 lbs.	\$3 30
"Armco" 10 ga.....per 100 lbs.	4 00

ONE PASS COLD ROLLED BLACK

No. 18-20.....per 100 lbs.	\$3 30
No. 22-24.....per 100 lbs.	1 85
No. 26.....per 100 lbs.	2 00
No. 27.....per 100 lbs.	2 35
No. 28.....per 100 lbs.	4 15
No. 29.....per 100 lbs.	4 10

GALVANIZED

"Armco" 28.....per 100 lbs.	\$8 55
No. 16.....per 100 lbs.	4 50
No. 18-20.....per 100 lbs.	4 55
No. 22-24.....per 100 lbs.	4 20
No. 26.....per 100 lbs.	4 35
No. 27.....per 100 lbs.	5 10
No. 28.....per 100 lbs.	5 25
No. 29.....per 100 lbs.	5 75

BAR SOLDER

Warranted 50-50.....per 100 lbs.	\$39 25
Commercial 45-55.....per 100 lbs.	36 75
Plumbers.....per 100 lbs.	34 25

ZINC

In Slabs	3 75
----------------	------

SHEET ZINC

Cask Lots (600 lbs.)	14 00
Sheet Lots	15 00

BRASS

Sheets, Chicago base.....	19 40
Mill base	19 40
Tubing, brazed base.....	27 40
Wire, base	19 40
Rods, base	17 40

COPPER

Sheets, Chicago base.....	22 40
Mill base	22 40
Tubing, seamless base.....	25 40
Wire No. 9 & 10, B. & S. Ga.	20 40
Wire No. 11, B. & S. Ga.....	20 40

HARDWARE, SHEET METAL SUPPLIES, WARM AIR FURNACE FITTINGS AND ACCESSORIES.

LEAD

American Pig	\$10 80
Bar	11 80
Sheet	
Full Colls.....per 100 lbs.	14 00
Cut Colls.....per 100 lbs.	14 25

TIN

Pig Tin	per 100 lbs. 70 50
Bar Tin.....per 100 lbs.	71 50

ASBESTOS

Paper up to 1/16	6c per lb.
Roll board	6 1/2c per lb.
Mill board 3/32 to 1/2.....	5c per lb.
Corrugated Paper (250 sp. ft. to roll).....	\$6.00 per roll

BRUSHES

Hot Air Pipe Cleaning	
Bristle, with handle, each	\$0 55
Flue Cleaning	
Steel Only, each	1 25

BURRS

Coppers Burrs only	45c
--------------------------	-----

CEMENT, FURNACE

American Seal, 5-lb. cans, net	\$ 45
American Seal, 50-lb. cans, net	90
American Seal, 25-lb. cans, net	3 00
Asbestos, 5-lb. cans, net.....	45
Pecora	per 100 lbs. 7 51

CHIMNEY TOPS

Iwan's Complete Rev. & Vent	30c
Iwan's Iron Mountain only.....	25c
Standard	\$0 to 40c

CLINKER TONGS

Front Rank, each.....	\$ 75
Per doz.	\$ 4 40

CLIPS

Damper	
Acme, with tall pieces, per doz.	\$1 25
Non Rivet tall pieces, per doz.	25

COPPERS—Soldering

Pointed Roofing	
1 lb. and heavier.....per lb.	40c
2 1/2 lb.	per lb. 45c
2 lb.	per lb. 45c
1 1/2 lb.	per lb. 55c
1 lb.	per lb. 60c

CORNICE BRAKES

Chicago Steel Banding	
Nos. 1 to 6B.....Net	

COUPLING HOSE

Brass	per doz. \$2 20
-------------	-----------------

CUT-OFFS

Kuehn's Korrekt Kutoffs:	
Galv., plain, round or cor. rd. standard gauge	40c
26 gauge	30c

DAMPERS

"Yankee" Hot Air	
7 inch, each 26c, doz.....	\$1 75
8 inch, each 26c, doz.....	2 40
9 inch, each 30c, doz.....	2 75
10 inch, each 32c, doz.....	3 00

Smoke Pipe	
7 inch, each.....	\$ 25
8 inch, each.....	40
9 inch, each.....	50
10 inch, each.....	60
12 inch, each.....	90

Reversible Check	
8 inch, each.....	\$1 50
9 inch, each.....	1 70

DIGGERS

Post Hole	
Iwan's Split Handle (Eureka)	
4-ft. Handle.....per doz.	\$14 00
7-ft. Handle.....per doz.	36 00
Iwan's Hercules pattern, per doz.	14 90

EAVES TROUGH

Galv. Crimpedge, crated.....	75 & 5%
------------------------------	---------

ELBOWS

Conductor Pipe Milcor.	
Galv., plain or corrugated, round flat Crimp.	
24 Gauge	55c
26 Gauge	55c
28 Gauge	40c
34 Gauge	10c

Square Corrugated	
Standard Gauge	50c
26 Gauge	30c

Portico Elbows	
Standard Gauge Conductor Pipe, plain or corrugated.	
Not nested	70 & 5%
Nested solid	70 & 5%

ELBOWS—Steve Pipe

1-piece Corrugated. Uniform Blue "Milcor" No. 28 gauge.	
5-inch	per doz. \$1 30
6-inch	1 40
7-inch	1 80

Special Corrugated

6-inch	\$1 25
7-inch	1 65

Adjustable—Uniform Blue

"Milcor" No. 28 Gauge. Uniform Blue	
5-inch	\$1 90
6-inch	2 00
7-inch	2 50

WOOD FACES—50% off list.

FENCE

726-6-12% (100 rods).....	\$29 02
1948-6-14% (100 rods).....	44 08

FILES AND RASPS

Heller's (American)	50-10%
American	60-10%
Arcade	50%
Black Diamond	40-10-5%
Eagle	50%
Great Western, Kerosene	50%
Kearney & Foot.....	50%
McClellan	50%
Nicholson	50%
Simonds	60%

FIRE POTS

Ashton Mfg. Co.	
Complete line	
Fire pots and Torches.....	52%

Otto Berns Co.

No. 1 Furn. Gasolene with large shield, 1 gal.....	\$ 6 75
No. 2 Furn. Kerosene, 1 gal.....	15 12
No. 3 Brazier, Kerosene or Gasolene, 10 gals.....	47 52
No. 5 Torch, Gasolene or Kerosene, 1 pt.....	7 92
No. 8 Torch, Gasolene, 1 quart	5 40
No. 16 Torch, Gasolene, 1 pint	4 05

Clayton & Lambert's

East of west boundary line of Province of Manitoba, Canada, No. Dakota, So. Dakota, Nebraska, Kansas, Oklahoma, Amarillo, San Angelo and Laredo, Texas	52%
West of above boundary line	42%

Geo. W. Dierker Mfg. Co. Ea.

No. 82 Gasolene Torch, 1 qt.	\$ 5 55
No. 8250, Kerosene, or Gasolene Torch, 1 qt.....	7 50
No. 10 Tinner's Furn. Square tank, 1 gal.....	12 60
No. 15 Tinner's Furn. Round tank, 1 gal.....	12 60
No. 31 Gas Soldering Furnace	2 40
No. 110 Automatic Gas Soldering Furnace.....	16 50

Double Blast Mfg. Co. Gasolene, Nos. 25 and 36.....

Quick Meal Stove Co. Vesuvius, F. O. B. St. Louis 30% (Extra Disc't. for large quantities)	
--	--

Chas. A. Hones, Inc.

Bussor No. 1.....	\$ 5 50
Bussor No. 2.....	12 00
Bussor No. 21.....	12 50
Bussor No. 43.....	15 00
Bussor No. 48.....	19 00

GALVANIZED WARE

Fails (Galv. after made).	
10-qt.	\$2 30
10-qt.	\$2 25

GLASS

Single Strength, A. 28-in. bracket	85c
Single Strength, A. 34 to 40-in. bracket	82c
Single Strength A, all other brackets	81c
Double Strength A, all sizes.....	82c
Tubs (Galv. after made).	
No. 1.....	\$6 25
No. 2.....	7 20

HANGERS

Conductor Pipe	
Milcor Perfection Wire.....	25%
Eaves Trough	
Milcor Eclipse Wire.....	15%
Milcor Triplex Wire.....	10%
Milcor Milwaukee Extension 10% Milcor Steel (galv. after forming) List plus.....	12 1/2%
Milcor Selflock E. T. Wire, List plus	50%

HOOBS

Box	
V. & B. No. 1, each.....	\$0 30
Conductor	
Milcor "Direct Drive" Wrought Iron for wood or brick.....	15%
Hay	
V. & B. No. 1, each.....	\$0 30

HUMIDIFIERS

"Front-Rank," Automatic	
In single lots	50%
In lots of 10 or more.....	50-5%
In lots of 25 or more.....	50-10%
Vapor pans, etc., each.....	50%

LIFTERS

Steve Cover	
Coppered	per gra. \$6 00
Alaska	per gra. 4 75

MALLETS

Tinner's Hickory	per doz. \$2 25
------------------------	-----------------

MITRES

Galvanized steel mitres, and caps, and pieces, outlets.....	30%
Milcor Galv. one piece stamped.....	40%

NAILS

Cut Steel	\$4 25
Cut Iron	4 25
Wire	
Common	\$ 15
Cement Coated	2 20

PERFORATED METALS

All Sizes and Shapes of Holes
In Steel, Zinc, Brass, Copper, Tinplate, etc.
For All Screening, Ventilating and Draining
EVERYTHING IN PERFORATING METAL

THE HARRINGTON & KING PERFORATING CO.

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Ventilator



IS of the rotatable type and swings absolutely free in the slightest draft. The construction is scientifically correct and unusually strong. It works perfectly in all kinds of weather and handles 50 per cent more air than stationary ventilators of equal size. Order from your jobber. Write for our catalog and prices today.

Manufactured by

STANDARD VENTILATOR CO.

LEWISBURG, PA.

**IWANS' VOLCANO
REVOLVING
CHIMNEY TOP**

THE design of the deflector brings the wind diagonally upward over the chimney opening through opening in lower part of hood. This construction creates a good draft on any chimney.



Simple iron mountings. Sold without hood so you can make your own tops. Strong, inexpensive and easy swinging.

Write today for catalog and price list.

IWAN BROTHERS

SOUTH BEND, IND.

Manufacturers of Hardware Specialties



Hood Patterns
FREE
with
order
for
iron
mountings

**EVERYTHING
FOR THE TINSMITH**

WE are manufacturers as well as merchants and we at all times have on hand a large complete stock of everything that you may be in need of.

Try us on your next order.

This is our motto:
“EVERYTHING MUST BE RIGHT”

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BERGER BROS. CO.

229 to 237 ARCH STREET

WAREROOMS AND FACTORY: 100 TO 114 BREAD STREET
PHILADELPHIA, PA.



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for
Stores, Offices
and Homes

**Hopson
Metal Ceilings
and Sides**

Truly dignified designs, characterize Hopson Metal Ceilings and Sides. They're all easy to match and install. Our pictorial catalogue will show what we have to offer in original designs. Get a copy today.

W. C. HOPSON CO.

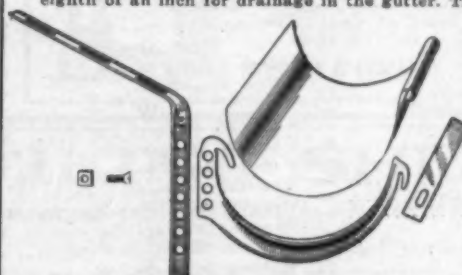
216 Elmhurst Ave.

Grand Rapids, Mich.



ROOF GUTTER SUPPORTS

This illustration shows, unassembled, one of the many styles of eaves trough hangers made by us which may be adjusted every eighth of an inch for drainage in the gutter. These hangers are



widely used throughout the United States. Write for catalog No. 27 which also illustrates and describes conductor hooks and fasteners.

Free Samples
Gladly Fur-
nished.

L. D. BERGER COMPANY

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NETTING, POULTRY

Galvanized before weav-	
ing.....	45-10%
Galvanized after weaving..	45%

PASTE

Asbestos Dry Paste:	
200-lb. barrel.....	\$15 00
100-lb. barrel.....	8 00
35-lb. pail.....	3 25
10-lb. bag.....	1 00
5-lb. bag.....	55
3 1/2-lb. cartons.....	30

PIPE

Conductor	
"Interlock" Galvanized	
Crated and nested (all	
gauges).....	75-2 1/4%
Crated and not nested	
(all gauges).....	70-15%
Square Corrugated A and B and	
Octagon.....	60-10%
29 gauge.....	60-10%
28 gauge.....	60-10%
25 gauge.....	60-10%
24 gauge.....	60-10%
"Milcor" "Titelock" Uniform	

Blue Stove	
28 gauge, 6 inch U. C.	
nested.....	16 00
26 gauge, 7 inch U. C.	
nested.....	17 00
28 gauge, 6 inch U. C.	
nested.....	12 25
28 gauge, 6 inch U. C.	
nested.....	13 00
28 gauge, 7 inch U. C.	
nested.....	15 00
30 gauge, 5 inch U. C.	
nested.....	11 25
30 gauge, 6 inch U. C.	
nested.....	13 00
30 gauge, 7 inch U. C.	
nested.....	14 00

T-Joint Made up	
6-inch, 28 ga.....per 100	32 50

Furnace Pipe	
Double Wall Pipe and	
Pipe Fittings.....	50%
Single Wall Pipe, Round	
Iron Pipe Galvanized.....	50%
Galvanized and Black	
Fittings.....	50%
Milcor Galvanized	
Pipe and Fittings.....	50%

Lead	
Per 100 lbs.....	\$12 50

POKERS, STOVE

Wrt Steel, str't or bent,	
per doz.....	\$0 75
Nickel Plated, coil handles,	
per doz.....	1 10

POKERS, FURNACE

Each.....	\$0 50
-----------	--------

PULLEYS

Furnace Tackle.....per doz.	\$0 60
per gross.....	6 00
Furnace Screw (encased).....	
per doz.....	75

Ventilating Register	
Per gross.....	9 00
Small, per pair.....	30
Large, per pair.....	50

PUTTY

Commercial Putty, 100-lb.	
kits.....	\$3 40

QUADRANTS

Malleable Iron Damper.....	10%
----------------------------	-----

BASEBOARD REGISTERS

Excelsior.....	50%
----------------	-----

FLOOR REGISTERS AND BORDERS

Cast Iron.....	30%
Steel and Semi-Steel.....	40%
Baseboard.....	40%
Adjustable Ceiling	
Ventilators.....	40%

Register Faces—Cast and Steel	
Japanned, Bronzed and	
Plated, 4x6 to 14x14.....	40%
Large Register Faces—Cast,	
14x14 to 38x42.....	60%
Large Register Faces—Steel,	
14x14 to 38x42.....	65%

RIDGE ROLL

Milcor	
Galv., Plain Ridge Roll,	
b'd'd.....	75-10%
Galv., Plain Ridge Roll,	
crated.....	75-10%
Globe Finials for Ridge Roll.....	50%

ROOFING

Best grade, slate surf. prep'd	\$3 20
Best talc surfaced.....	2 60
Medium talc surfaced.....	2 00
Light talc surfaced.....	1 50
Red Rosin Sheeting, per ton	57 00

SCREWS

Sheet Metal	
No. 7, 3/4x1/4, per gross.....	\$0 52
No. 10, 3/4x1/4, per gross.....	65
No. 14, 3/4x1/4, per gross.....	83

SHEARS, TINNERS' & MACHINISTS'

Viking.....	\$22 00
-------------	---------

Lennox Throatless	
No. 18.....	35%
Shear blades.....	10%
(f. o. b. Marshalltown, Iowa.)	

Peerless Steel Squaring

Foot Power	
No. 1—20", 18 ga. cap.....	15%
No. 2—26", 18 ga. cap.....	15%
No. 4—32", 18 ga. cap.....	15%
No. 10—120", 22 ga. cap.....	15%
No. 4A—52", 16 ga. cap.....	15%

Cast Iron Foot Power

No. 01—30", 18 ga. cap.....	15%
-----------------------------	-----

Power Driven

No. 100 Series, 2 Shaft Drive.)	
No. 142—42", 18 ga. cap.....	15%
(No. 300 Series, 3 Shaft Under-	
neath Drive.).....	
No. 242—42", 14 ga. cap.....	15%
(No. 300 Series, 3 Shaft Under-	
neath Drive.).....	
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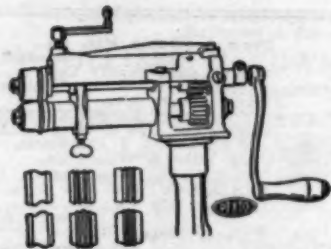
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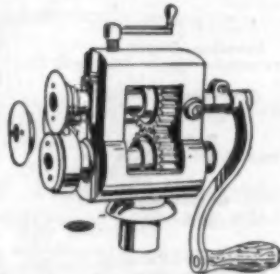
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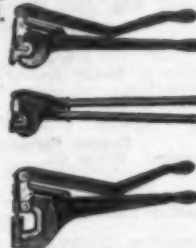
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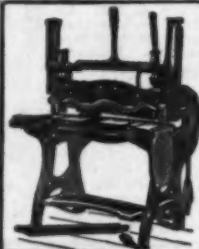
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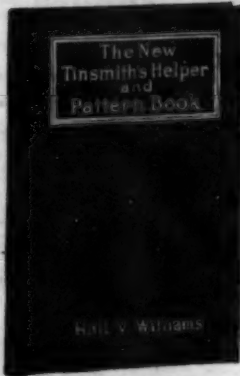
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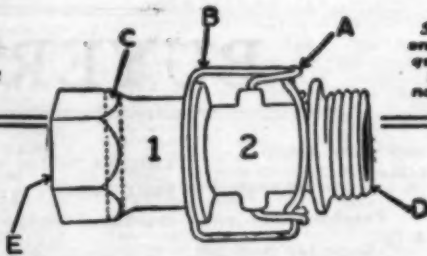
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Marshalltown, Iowa
Peck, Stow & Wilcox Co.,
Southington, Conn.
Unishear Co., The,
New York
Viking Shear Co.,
Erie, Pa.

Sheets—Black and Galvanized.
American Rolling Mill Co.,
Middletown, Ohio
Davis Co., Inc., C. S.,
Chicago, Ill.
Inland Steel Co.,
Chicago, Ill.
Merchant & Evans Co.,
Philadelphia, Pa.
Milwaukee Corrugating Co.,
Milwaukee, Wis.
National Enameling and Stamping Co.,
Granite City Steel Works,
Granite City, Ill.
Osborn Co., The J. M. & L. A.,
Cleveland, Ohio
Taylor Co., N. & G.,
Philadelphia, Pa.
Wheeling Corrugating Co.,
Wheeling, W. Va.

Sheets—Zinc.
New Jersey Zinc Sales Co., The,
New York, N. Y.

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Sall Mountain Co.,
Chicago, Ill.

Shingles—Zinc.
Milwaukee Corrugating Co.,
Milwaukee, Wis.

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David Lupton's Sons Co.,
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Heating Systems & Supply Co.,
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Osborn Co., The J. M. & L. A.,
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Peck, Stow & Wilcox Co.,
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Coss Wrench Co.,
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Zinc.
Merchant & Evans Co.,
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Mention AMERICAN ARTISAN in your reply—Thank you!

WANTS AND SALES

For paid yearly subscribers, **AMERICAN ARTISAN AND HARDWARE RECORD** will insert under this head advertisements of not more than fifty words **WITHOUT CHARGE**. Employers wishing to secure employees, parties desiring to purchase or sell business, secure partners, or to exchange, etc., will find that these pages offer excellent opportunities to satisfy their wants. Clerks and tinsmiths looking for situations will find it to their advantage to use these columns. Those who respond to these announcements please mention that they "READ THE ADVERTISEMENT IN AMERICAN ARTISAN AND HARDWARE RECORD."

BUSINESS CHANCES

LIGHTNING RODS—Dealers who are selling Lightning Protection will make money by writing us for our latest Factory to Dealer Prices. We employ no salesmen and save you all overhead charges. Our Pure Copper Cable is endorsed by the Mutual Insurance Companies and hundreds of reliable dealers. Write today for samples and prices. L. K. DIDDLE CO., Marshfield, Wis.

For Sale—Hardware and tin shop in Denver, Colorado. One of the best shops in city. Plenty of work and fine business. Cheap rent, fine equipment. Must sell. Will stay with buyer a few months if necessary. Business will run about \$5,000 cash, stock, fixtures and trucks. Address A-76, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 5-3t

For Sale—Sheet metal manufacturing shop of the late C. W. Fair. Fully equipped with machines and tools for sheet metal and tin work. Established 35 years. Wonderful opportunity to start in business. Value \$4,000 for quick sale reduced to \$2,500 cash. Address 1754 Blake Street, Denver, Colorado. 3-3t

For Sale—Sheet metal shop fully equipped with tools and stock. Shop is 40x60 ft. with office and garages, also 7 room modern house on same lot 3½x9 rods. Very close in and fine location for a furnace agency. For full particulars write F. G. Oberlin, 214 South Larch St., Lansing, Michigan. 4-3t

For Sale—\$1,000 buys a well equipped sheet metal and radiator shop, doing good business for seven years, located in a city of 22,000 population, good reasons for selling. Write for particulars to the Automobile Sheet Metal Company, corner 4th and Market Street, Winona, Minnesota. 5-3t

Wanted—To buy hardware stock in town of 1,500 population or more. Please state amount of cash necessary to purchase, volume of business last year and size of town in first letter. Address A-61, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 2-3t

For Sale—First-class sheet metal shop with one-ton Ford truck. This shop has been established six years. Machinery in first-class condition. Good reason for selling. Will sell cheap. Only a small cash payment needed. Call Vincennes 4146, or address 361 East 69th Street, Chicago, Illinois. 5-3t

For Sale—Stock of hardware. Tinner's tools, fixtures and truck. Inhabitants 4500. Good paying business. Best reason for selling. Would like to get out of business on or before February 15. If interested address A-73, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 5-3t

For Sale—Hardware store selling radio and paints together with tin shop. Located in a city of 10,000 in central Illinois. Stock invoices about \$16,000. 35 years in present location. Address A-58, care of AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 3-3t

BUSINESS CHANCES

For Sale—Stock of hardware, \$6,000 to \$7,000, in a good farming country. Large territory. High school, two churches. Will sell or rent building. A good chance for a good tinner. Reason for selling on account of old age. Address Asemisen & Klinger, Oelrichs, South Dakota. 5-3t

For Sale—Established fully equipped tin shop in Port Arthur, Texas. Population 40,000. Retiring on account of old age. Opportunity for a hustler. Address P. A. Wutke, 1712 5th Street, Port Arthur, Texas. 5-3t

For Sale—Sheet metal, heating, radiator shop and sporting goods, in the fastest growing town in the northwest. Best of reasons for selling. Address A-71, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 5-3t

For Sale—Plumbing and heating shop in northern Iowa. Reason for sale proprietor's death. For particulars address Mrs. D. E. Schrader, Charles City, Iowa. 4-3t

HELP WANTED

Wanted—Two good furnace salesmen to sell warm air heating systems direct to home owners in Moline, Rock Island and Davenport. Wonderful opportunity to make money. Will teach the fine points of the game. We sell and install the finest furnaces and heating systems in America. Address General Manager E. A. Freed, 1530 3rd Avenue, Moline, Illinois. 4-3t

Wanted—As soon as possible an all around plumber and steamfitter. We have a steady position for a man that would like to settle down in Northern Illinois, appreciates a good job. Please state age, nationality and wages expected. Address A-67, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 4-3t

Tinner Wanted—To work for yourself. Stop punching the clock. With \$5.00 stock and hand tools you can make \$10 to \$20 per day at home or travel. I am doing it, so can you. Printed instructions \$2.00. Remit \$1.00 with letter and balance when you make it. Address L. E. Miller, Goodland, Indiana. 3-4t

Wanted—First-class skylight and cornice makers as job workers who are skilled and accurate mechanics and are producers. Also about March 1 will need a working foreman who can estimate. Steady job. Fine growing city in the finest all year climate. Union shop. Address Box 1936, St. Petersburg, Florida. 3-3t

Wanted—First-class tinner and furnace man who will be willing to invest not less than \$500 in stock in the company, that can show a fair profit for the past three years. Must be able to estimate tin and furnace work. Address Seeger Sheet Metal & Furnace Company, 660 3rd Street, Milwaukee, Wisconsin. 5-3t

Wanted—Sheet metal and furnace man. Must be able to lay out work and figure job. Steady work year around. State wages in first letter. Suburb of Chicago. Address A-69, care of AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 2-3t

Wanted—Expert sheet metal worker (Not over 40 years of age) with ability to make quickly and neatly. Anything in Sheet Metal. Good pay and steady work. Address Shop Foreman, P. O. Box 123, North Emporia, Virginia. 4-3t

Wanted—First-class tinner and sheet metal worker in Illinois town of 10,000. Steady job for the right man. Do not apply unless competent. Address A-62, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 3-3t

Wanted—Good tinner and sheet metal worker. Knowledge of plumbing desirable, but not necessary. Not over 35 years of age. Good city. Good wages paid to man who can deliver. Address Milton L. Klesler, Alexander City, Alabama. 5-3t

Wanted—Tinner. Must be first class in all lines of sheet metal work. Steady job for man knowing his line. The Metal Products Co., 118 N. Weber, Colorado Springs, Colorado. 4-3t

SITUATION WANTED

Situation Wanted—Young married man wants position as tinner, plumber and furnace man in Iowa, Minnesota or Wisconsin. State salary in first letter. Steady job only considered. Address Harold J. Kelleher, Clear Lake, Iowa. 5-3t

SITUATION WANTED

Situation Wanted—By sheet metal worker and warm air furnace man. Forty years of age with 22 years' experience. Have run my own shop for past 12 years, running as high as nine men. Thoroughly understand the business as well as the mechanical end. Am quick and active. Would like to make a change. Position must be something above the average. Would consider a salary and commission. Address G. C. Van Tassel, 520 Eagle Street, Niles, Michigan. 1-3t

Situation Wanted—Shop foreman would like to hear from furnace manufacturers that are interested in the manufacturer of tin and galvanized furnace pipe elbows, etc. You can produce double safety pipe for 1 cent per foot. Furnace casings and hoods at prices that will surprise you. Expect to save more than my salary from the start. Address A-66, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 4-3t

Situation Wanted—By March 1st. By a first class combination plumber, tinner, steam fitter and all around repairing. Prefer a job with some good hardware firm. Married, want steady position the year around. Please state wages in first letter. Address A-70, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 4-3t

Situation Wanted—Position by first class sheet metal worker. Can do anything in sheet metal line and layout own patterns. Forty years of age. Can do estimating and fully capable of taking charge of shop as foreman or superintendent. Expert on blower and ventilating systems. Address Arno C. Goethel, care Ludwig Hotel, Winona, Minnesota. 5-3t

Situation Wanted—By a married man with twenty years' experience in heating, plumbing, sheet metal, pump and windmill work. Do not use tobacco or liquor in any form. Can furnish the best of references. Can start work at any time. State wages in first letter. Address A-75, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 5-3t

Situation Wanted—Live wire furnace and warm air heating engineer would like to get in correspondence with warm air furnace manufacturers that are interested in operating a retail furnace business in Milwaukee, Wisconsin. Address A-65, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 4-3t

Situation Wanted—I am open for a proposition on a commission basis with a reliable concern to sell plumbing or sheet metal goods on the road. Also have some tinner's and plumber's tools which will sell cheap. Address M., P. O. Box 27, Oswego, Illinois. 4-3t

Situation Wanted—By sheet metal worker as shop man or inside foreman. Good on cornice, skylight, heating, ventilation and blowpipe on any and all classes of sheet metal work. Middle age. Steady job. Address D. C. C., 948 North Illinois Street, Indianapolis, Indiana. 5-3t

Situation Wanted—Hardware man wishes to connect with A1 firm. Have had 12 years' experience. Only steady position considered. Married. Can give A-1 references. Address A-74, care AMERICAN ARTISAN, 620 South Michigan Ave., Chicago, Illinois. 5-3t

Situation Wanted—By a first class tinner and furnace man. Steady and reliable would like position with some good firm in Wisconsin or Illinois. Address A-64, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 4-3t

Situation Wanted—Would like to hear from some good firm that wants a competent man, experienced in furnace work and other branches of the trade. Address A-55, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 2-3t

Situation Wanted—By married man, 43 years old. English speaking, competent in sheet metal, furnace and plumbing. Can also do well work and clerk in hardware store. Address A-54, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 2-3t

Situation Wanted—By young married man. Experienced tinner and furnace man. None but steady position desired. Prefer Wisconsin, Northern Iowa or Southern Minnesota. Address A-66, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 3-3t

TINNERS' TOOLS

Wanted—Set of used tinner's tools and machines including an eight foot brake. State condition and price. Address E. W. Hlatt, Sarasota, Florida. 4-3t

Wanted—A complete set of tinner's tools. Address A-63, care of AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 3-3t

Wanted—To buy second hand tinner's shop tools. Address C. D. Averill, Wayland, Michigan. 3-3t

For Sale—1 circle shear 60-in. circle, 6-in. Diameter cutters. Power driven to cut 3/4-in. Also one tinner's brake—Dreis & Krump 16 gauge 48-in. wide. Address A-68, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 4-3t

Wanted—Double seamer to make wash boilers 14 1/2 in. bottom, 19 1/4 in. diameter. Top, 20 ins. high flaring disc, 26 gauge material. Also throatless shear. State make, condition and lowest cash price. Address P. O. Box 147, Comfort, Texas. 5-3t.

SPECIAL NOTICES

Special Notices — displayed want ads—are charged at the rate of \$3.00 per inch per insertion.

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A foreman experienced in the manufacture of Tin Furnace Fittings can secure permanent connection with large manufacturer in central states. A man capable of bigger things than his past opportunities have permitted will find this just what he has been wishing for. Give details of age and experience in first letter. Address L-43, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 1-tf

FURNACE SALES EXECUTIVE WANTS POSITION

Young, active furnace man who knows warm air heating by reason of actual experience and who has been responsible for developing sales and selling systems and ideas, is open for position with any good furnace manufacturer. Will furnish references as to ability and character. Want to connect at once. Address L-36, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 24-3t

SALESMAN WANTED

To sell high class competitive type cast furnace, also a complete line of furnace accessories in the State of Illinois. Address L-44, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 2-3t

SPECIAL NOTICES**PRACTICAL HEATING MAN WANTS POSITION**

All around heating and plumbing expert looking for a change. Superintendent, estimator, or direct charge with responsible firm.

I am a practical plumber holding state license; good draftsman and thoroughly acquainted with vapor, vacuum, steam, water and warm air heating. Have laid out and installed jobs in small to large offices and public buildings. Use standard code in all warm air work. At present employed. Would consider a change. Prefer California. Not afraid to work, am not looking for a snap. Address L-45, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 3-1t

WANTED

A first class hustling city furnace salesman, one familiar with house to house canvassing preferred. Commission. Address L-46, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 5-3t.

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The only single cut-off made to fit Corrugated and plain pipe and which can be used without extra pipe or elbows.

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City of 1,000 with two refineries, oil industry and ranch community. Only shop in city. Plenty of work. Will sell with or without building. Good location. Stock and equipment seven thousand dollars. With building fourteen thousand. Actual cost of building and lot, stock and equipment, twenty-three thousand. Will sacrifice on account of going back to ranch. About four thousand cash, balance on easy terms. Address W. R. Cronk, Box 474, Glenrock, Wyoming. 25-3t

Manufacturing Business For Sale

Having developed a new item and wishing to devote our entire time to it are offering for sale our business of manufacturing Auto Radiator Repairing Tools and Supplies. This is a well established business with items recognized nationally as standard equipment. Can be moved or conducted in its present location and building. F. L. Curfman Mfg. Co., Maryville, Missouri. *3-4t

SITUATION WANTED

As Sales Manager or Assistant to the Sales Manager of a good responsible stove or furnace company by young man who can show actual proof of his ability. Am not a "job hunter" but am looking for a connection with good possibilities as I feel I have outgrown my present position. Address L-30, care AMERICAN ARTISAN, 620 South Michigan Avenue, Chicago, Illinois. 22-4t

FURNACE SALESMAN WANTED

Good territory. Commissions on sales, discounts and volume. Address L-47, care of AMERICAN ARTISAN, 620 South Michigan Ave., Chicago, Illinois. 5-1t



"You see, I have to do things big, judging by the size of my family," writes a student on the back of a kodak picture similar to the above. He adds: "Nothing small about me, I got through being a cheap mechanic when I took your course, and my business has grown wonderfully since, and I feel I really owe it to the St. Louis Technical Institute."

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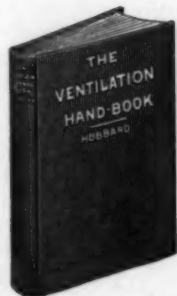
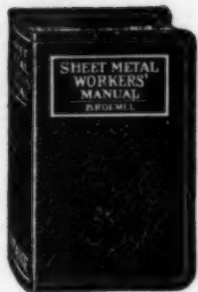
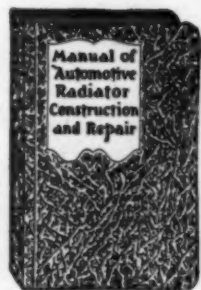
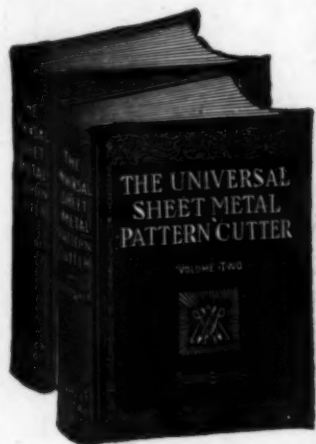
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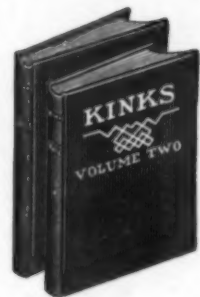
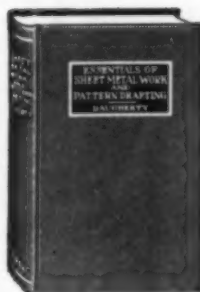
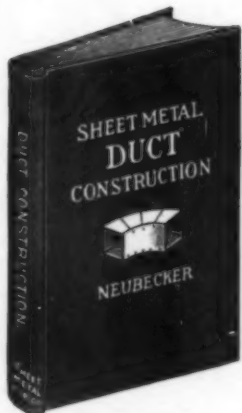
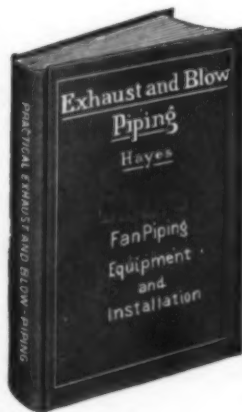
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